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using Smith-Waterman algorithm database search, n.a. n.a MPsrch_nn

Seconds . updates/sec MasPar time 13516.58 1569.436 Million cell 8 17:01:38 1999; Sun Aug Run on:

not generated. output Tabular

10) of >US-08-287-669-18 (1-7653) from US08287669.seq (10 7653 Description: Perfect Score: N.A. Sequence:

1 AGATCTGAAATAAGGTGATA....
TCTAGACTTTATTCCACTAT....

...ATTCTGGTCAGCAAAGATCT 7653

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646147 Searched:

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bases seqs, 1385953633

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Minimum Match 0% Listing first 1000 Post-processing:

summaries

Database

Database

embl58
1:em_bal 2:em_ba2 3:em_fun 4:em_htg 5:em_hum1 6:em_hum2
7:em_in 8:em_om 9:em_or 10:em_ov 11:em_pat 12:em_ph
13:em_pl 14:em_ro 15:em_sts 16:em_vi
genbank111
17:gb_bal 18:gb_ba2 19:gb_htg1 20:gb_htg2 21:gb_in1
17:gb_bal 18:gb_ba2 19:gb_htg1 20:gb_htg2 21:gb_in1
22:gb_in2 23:gb_om 24:gb_ov 25:gb_pat 26:gb_ph 27:gb_pl1
28:gb_pl2 29:gb_pr1 30:gb_pr2 31:gb_pr3 32:gb_ro
33:gb_st 34:gb_sts 35:gb_sy 36:gb_un 37:gb_vi

scale 2.064 5.255; Variance Mean 10.846; Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		φp					
Result No.	Score		ength	ũ	ID	Description	Pred. No.
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Caenorhabditis elegans cell death protein (ced-3) gene, concds.

L29052

9456416

L29052.1 GI:456416

Caenorhabditis elegans (strain N2) DNA.

Caenorhabditis elegans (strain N2) DNA.

Caenorhabditis elegans (strain N2) DNA.

Caenorhabditis elegans

Caenorhabditis elegans

Caenorhabditis elegans

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Rhabditidae; Caenorhabditis.

1 (bases 1 to 7653)

Yuan, J., Shaham, S., Ledoux, S., Ellis, H.M. and Horvitz, H.

The C. elegans cell death gene ced-3 encodes a protein simmammalian interleukin-1b-converting enzyme

Cell 75, 641-652 (1993)
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                                                                                                                               Human DNA sequence ***
Caenorhabditis elegans
Homo sapiens clone DJO
Caenorhabditis elegans
Homo sapiens clone DJI
Human DNA sequence ***
Caenorhabditis elegans
 Plasmodium falciparum
Caenorhabditis elegans
Caenorhabditis elegans
Caenorhabditis elegans
Gaenorhabditis elegans
Human BAC clone RG308B
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YDLLNAANAPRLANKPKIVFVQACRGERRDNGFPVLDSVDGVPAFLRRGWDNRDGPLF
NFLGCVRPQVQQVWRKKPSQADILIRYATTAQYVSWRNSARGSWFIQAVCEVFSTHAK
DMDVVELLTEVNKKVACGFQTSQGSNILKQMPEMTSRLLKKFYFWPEARNSAV"
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qa	1201	TAACATCTTATTTTATAATATTTCCGCTAAAATTCCGAT	1260
QY	1201	TAACATCTTATTTTATAATATTTCCGCTAAAATTCCGATTTTGAGTATT	1260
QQ	1261	ATTTATCGTAAAATTATCATAATAGCACCGAAAACTACTAAAAATGGTAAAAGCTCCTTT	32
Oy	1261	PAAAATTATCATAATAGCACCGAAAACTACTAAAAATGGTAAAAGCTCCTT	1320
QQ	1321	TAAATCGGCTCGACATTATCGTATTAAGGAATCACAAAATTCTGAGAATGCGTACTGCGC	1380
ΟŊ	1321	ence de la company de la compa	1380
qq	38	AACATATTTGACGGCAAAATATCTCGTAGCGAAAACTACAGTAATTCTTTAAATGACTAC	44
δλ	1381	SACGGCAAAATATCTCGTAGCGAAAACTACAGTAATTCTTTAAATGACTA	44
qq	1441	TGTAGCGCTTGTGTCGATTTACGGGCTCAATTTTTGAAAATAATTTTTTTT	1500
Qy	1441	TIGIGICGATITACGGGCTCAATTITIGAAAATAATTITITITITGGAATT	1500
qq	1501	TGATAACCCGTAAATCGTCACAACGCTACAGTAGTCATTTAAAGGATTACTGTAGTTCTA	1560
Qy	1501	TAACCCGTAAATCGTCACAACGCTACAGTAGTCATTTAAAGGATTACTGTAGTTCT	1560
qq	1561	TTTTGCGCGCCAAATATGACTGTAATACG	1620
Qγ	1561	NTTTTGCGCCCAAATATGACTGTAATACGCATTCTCTGAATTTTGTGT	1620
QQ	1621	TTCACAAGATTTTGGCATTCCACTTTAAAGGCGCACAGGATTTATTCC	1680
Qy	1621		1680
QQ	1681	GCACGCAAAAAGTTTGATAGACTTTTAAATTCTCCTTGC	1740
QY	1681	GCACGCAAAAAGTTTGATAGACTTTTAAATTCTCCTTGCATTTTAAAT	1740
QQ	1741	AATTITCGIGAATTITCIGITAAAATTITTAAAATCAGITTITCIAAT	1800
Qy	1741	AAAATTTTCGTGAATTTTTCTGTTAAAATTTTTAAAATCAGTTTTCTAATAT	1800
qq	1801	CAAACAGAAACAAAACACAACAACAATTTTAAAAA	1860
Qy	1801	GACAAACAGAAACAAAAACACAACATTTTAAAAATCAGTTTTCAAA	1860
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qа	1981	TCAAAATTTTCCGATTTTACTGACTTTCACCTTTTTTTTCGTAG	2040
Qγ	1981	AAGAGGGTCAAAATTTTCCGATTTTACTGACTTTCACCTTTTTTTT	2040
QQ	2041	GAGTITITGACGAAAACTAGGAAAAAAAATCGATAA	2100
Qy	2041	AGTTGTTGGAGTTTTTGACGAAAACTAGGAAAAAAATCGATAAAAATTACTCAAAATC	2100
qq	2101	TTGAGGACAATGTTTAAAAAAAAAACACTATTTTT	2160
QY	2101	TTTGAGGACAATGTTTAAAAAAAACACTATTTTTCCAATAATTTCACTCA	2160
QQ	2161	TTTCAGACTAAATCGAAAATCGTACTCTGACTACGGGTCAGTAGAGAGGTCAACC	2220
δy	2161	AATCGAAAATCAAATCGTACTCTGACTACGGGTCAGTAGAGAGGTCAAC	2220
QQ	2221	ATCAGCCGAAGATGATGCGTCAAGATAGAAGGAGCTTGCTAGAGGAGGAACATTATGATGT	2280
ОУ	2221	CAGCCGAAGATGATGCGTCAAGATAGAAGGAGCTTGCTAGAGAGAG	2280

a Q	2281	TCTCTAGTCATCTAAAAGTCGATGAAATTCTCGAAGTTCTCATCGCAAAACAAGTGTTGA 2340
Oy Oy	2341	ATAGTGATAATGGAGATATGATTAATGTGAGTTTTTAATCGAATAATAATTTTAAAAAA 2400
Db Qy	2401	AATTGATAATATAAAGAATATTTTGCAGTCATGTGGAACGGTTCGCGAGAGAGA
Oy Oy	2461	AGATCGTGAAAGCAGTGCAACGACGGGGAGATGTGGCGTTCGACGCGTTTTATGATGCTC 2520
DD Qy	2521	TTCGCTCTACGGGACACGAAGGACTTGCTGAAGTTCTTGAACCTCTCGCCAGATCGTAGG 2580
Op Oy	2581 2581	TTTTTAAAGTTCGGCGCAAAAGCAAGGGTCTCACGGAAAAAAGGGCGGATCGTAATTTT 2640
Db Qy	2641	GCAACCCACCGGCACGGTTTTTCCTCCGAAAATCGGAAATTATGCACTTTCCCAAATAT 2700
Oy Oy	2701	TTGAAGTGAAATATATTTATTTACTGAAAGCTCGAGTGATTATTTTTTTT
do y	2761 2761	ATTTTCGTGGCGCAAAAGGCCATTTTGTAGATTTGCCGAAAATACTTGTCACACACA
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DP OY	2881	GTGTCCAATGTCACCGGCAAGCCATCGTCGGAGCCGCGATTGAGCCCCGCCGGCTACAC 2940
Dp Oy	2941	TTCACCGACCCGAGTTCACCGTGACAGCGTCTTTCAGTGTCATTCAT
טיט אָס	3001	GGATATCTACTCAAGAGCAAGATCTCGTTCTCGATCGCGTGCACTTCATTCGATCG 3060
Q V	3061	ACACAATTATTCATCTCCTCCAGTCAACGCATTTCCCAGCCAACCTTGTATGTTGATGCG 3120
O O V	3121	AACACTAAATTCTGAGAATGCGCATTACTCAACATATTTGACGCGCAAATATCTCGTAGC 3180
oy Oy	3181	GAAAATACAGTAACCCTTTAAATGACTATTGTAGTGTCGATTTACGGGCTCGATTTTCG 3240
do Qy	3241	AAACGAATATATGCTCGAATTGTGACAACGAATTTTAATTTGTCATTTTTGTGTTTTCTT 3300
Db Qy	3301	TTGATATTTTTGATCAATTAATAATTATTTCCGTAAACAGACACCCGGCTACAGTACT 3360
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qa	5341	TGGACAATAAACCTTCCTAATCACCAAAAAGTAAAATTGAAATCTTCGAAAAGCCAAAAA 5400
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qq	5461	CTGCAAAATACCAAAAAGAAACCCGAAAAATTTCCCAGCCTTGTTCCT 5520
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23-NOV-1998

CEC48D1 39908 bp DNA INV 23-NC Caenorhabditis elegans cosmid C48D1, complete sequence. 281049

LOCUS DEFINITION ACCESSION

RESULT

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http://webace.sanger.ac.uk/cgi-
bin/display?db=wormace&class=Sequence &object=C48D1
Current sequence finishing criteria for the C. elegans genome
sequencing consortium are that all bases are either sequenced
unambiguously on both strands, or on a single strand with both a
dye primer and dye terminator reaction, from distinct subclones.

Exceptions are indicated by an explicit note.

IMPORTANT: This sequence is NOT necessarily the entire insert of
the specified clone. It may be shorter because we only sequence
overlapping sections once, or longer because we arrange for a small
This sequence is the entire insert of clone C48D1. The true right
end of clone F58D2 is at 18510 in this sequence. The start of this
sequence (1. .100) overlaps with the end of sequence 281093.
The end of this sequence (33020. .39908) overlaps with the start of
sequence z82274.
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.4331,4382. .4439))
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Wilson, R., Ainscough, R., Connell, M., Copsey, T., Cooper, J.,
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Wilkinson-Sproat, J. and Wohldman, P.
2.2 Mb of contiguous nucleotide sequence from chromosome III of C.
elegans
L Nature 368 (6466), 32-38 (1994)
                                                                                                                                                        Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.
1 (bases 1 to 39908)
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                                                                                                                                                                                                                                                                                                                                       USA. E-mail:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .1951,2283.
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                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (21-OCT-1996) Louis, MO 63110, U
jes@sanger.ac.uk or rw@nematode.wustl.edu
2 (bases 1 to 39908)
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                                                                                           Caenorhabditis elegans.
Caenorhabditis elegans
                                       GI:1627677
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Mon Aug

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complement(join(6258..6349,6876...7065,7420...)
7602...7815,8728...9059,10248...10501,10780...1
10989...11120))
/gene="C48D1.2"
/note="similar to Caspase recruitment domain, I(
protease (caspase) p20 domain., ICE-like protease (caspase) p10 domain.; cDNA EST EMBL:D75533 compthis gene; cDNA EST yk198f10.5 comes from this followart=1
/codon_start=1
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/db_xref="PID:e1344743"
/db_xref="PID:g3875050"
/db_xref="SPTREMBL:002229"
/tpacelation_manner:repartment:rapp.
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/gene="C48D1.3"
/note="Similarity to Salmonella sodi
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/db_xref="PID:e1344742"
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/db_xref="GI:3875049"
/db_xref="SPTREMBL:002228"
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/gene="C48D1.3"
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TTCTCCACACTTGCTGCAAAATTTATTAATTATCATTTAAAAATGTTTACAGGACGG 7111	AGCAATTCACTCCGCCCACTTTCAAACCAATCCGATGAAGTGGGCGGAGATCGACGATG 729; 11111111111111111111111111111111111	AATTGCAACCTGAACTTGCGGCCGCACATCCAAGAAATTGAACAATGGCCCGTCTCG 7470	GGCTCGACAAGCCTGCACAAAACGATTTTCGGCTTATTCGCCAGACG 765 111111111111111111111111111111111111	TTGGC GAACA IIIII TTT-GG	TTTTTTTGAATTTTTGGAAGATTTCAATTTTACTTTTTGGTGATTAGGAAG 8007
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d C	8127	TCTCGTTGCTGTGGATATTTTTAAAATCGATTTTTCATTCTCTTTTTCTCGATTTGTTAA	8186
qa	8187	TTTGAAAAATCTAGAAAAATGTTATAAAACTTTTCTAAAATCCTTCATGAT	24
Cp	5172	IGAAAAATCTAGAAAAATGTTATAAAACTTTTCTAAATCCTTCATGA	5113
do f	24	TTTCAAATTTTGCAAAAATAAACAAATCGGATGAATAACTTTTGAATTTGAATTGTGACG	30
מ' ל	2116	TTGCAAAAATAAACAAATCGGATGAATAACTTTTGAATTTGAATTGTGAC	5053
a S	8307	TTGTTTTGATTTTTATTGCTTTTCCGGAGTGGTTTTTAAAGTTTTTAAAAATACATTTCA	9
d d		ATTITIAAAAAAAAATACATTITICCGGAGTGGTTTTTAAAAAAAAAA	66
CP	4992		84 2 b 4 9 3 3
qq	8427	AGAAAATTGATTTCGTGCTATCAAGTTTTGTATGCGGAAAATTGTCTGAAAA	œ
СЪ	4932		4873
QQ	8487	TATTATAGAAAACTAAGAAAAAAACACATAATGTA	8546
Cp	4872	GTTTTTACATCAAATATTATAGAAAAACTAA	4813
qq	8547	GAAAATTTCGAAACTAGGTAAATCATTTTCGCGGAAGTTCAAAATTTT	9098
Cp	4812	AAACGAAAATTTCGAAACTAGGTAAATCATTTTCGCGGAAGTTCAAAATTTT	4753
qq	8607	ACATTTTGCATTTAACACAAATTGTCGTGTCGAGACCGGGCG	9998
СЪ	4752	SAAAATTATACATTTTGCATTTAACACAAATTGTCGTGTCGAGACCGGGCG	4693
do .	99	AAATGGCAAAATTTCGCGTTTGGGTAATATAATTTCGCCGTA	8726
Ср	or .	TCGGCGCAAAA-TGGCAAATTTCGCGTTTGGGTAATATAATTTCGCCGTA	4636
qq	8727	TTGCAAATAACCGTATAGCCCATGCATCTGAACAAATTGG	8786
Cp	4635	GTCAGATTGTCTTGCAAATAACCGTATAGCCCATGCATCTGAACAAATTG	1576
QQ	8787	CCTTGTCGGCCTTGGTACCATTCCGTGTTGGCATCTGCTCA	846
Cp	4575	TCCTTGTCGGCCTTGGTACCATTCCGTGTTGGCATCTGCTCAAAGTGTTCA	516
Dβ	8847	SAGGCACATTCCACGAGGACTCGAGAAGTTTCTGTACATGGTTTTCTCG	906
СЪ	4515	ATGAGGCACATTCCACGAGGACTCGAGAAGTTTCTGTACATGGTTTTCT	456
QQ	8907	ATGGTTGGTGCATCGACAAAGTTCATATCCTCTTCATGGAATATG	996
СЪ	4455	GGCTTATGGTTGGTCGACAAAGTTCATATCT	396
QQ	8967	SCTGAATGAGCGATTACGACTTGAACTGTATCCGAGA	026
Ср	4395	GTCCAGAAGCTTTGCTGAAT	336
qq	9027	CGGTGAATGAAGAGTTGGCGGATGCTGAAATGTGTTGGTTTTAGGATCG	980
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QQ	9087	TITGATACCCAAATITCCTCTTTTTGACGTTTCGCACATTTTAATTTCGCAATGTTTCA 9	146
Ср	4275	CAAATTTCCTCTTTTTGACGTTTCGCACATTTTAATTTCGCAATGTTTC	216
qΩ	9147	PATCCTCTAGAATTTTGATTTCCCTTTTAATTTTCTACATTCATGTGATG	206
Ср		ATCCTCTAGAATTTTGATTTCCCTTTTAATTTTCTACATTCATGTGAT	156
qq	9207	AGAAAAATGCAAAAATGTATTTTAATGCATTTTTCAATTTTCGCAGAATTTTTGATTTT 9	266

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                                  TTGAAGGAGATGTGTGTGTGTGTGTGACAAGTATTTTCGGCAAATCTACAAAATGGCC
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Submitted (04-MAR-1999) Nematode Sequencing Project, Sanger Centre, Submitted (04-MAR-1999) Nematode Sequencing Project, Sanger Centre, Hinxton, Cambridge CB10 1RQ, UK and Department of Genetics, Washington University, St. Louis, MO 63110, USA. E-mail: jes@sanger.ac.uk or rw@nematode.wustl.edu
On Mar 22, 1999 this Sequence version replaced gi:4468145.
IMPORTANT: This Sequence is unfinished and does not necessarily represent the correct sequence. Work on the sequence is in progress and the release of this data is based on the understanding that the sequence may change as work continues. The sequence may be contaminated with foreign sequence from E.coli, yeast, vector, phage etc. Order of segments is not known; 800 n's separate
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Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis
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McMurray, A.
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12553 · AATATAATGCGATTTGGATTGTTTAAAGCATTGAAATTGCGACAAAGAGCTATAAAATCG
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This record will be updated with the finished sequence as soon as it is available and the accession number will
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          /organism="Caenorhabditis
/db_xref="taxon:6239"
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අ	b 239662 p 3349	GCTGGTGTCTGTTTACGGAAATAATTTATTAATTGATCAAAAATATCAAAAGAAAACAC	3.0
qu	b 239722	AAAATGACAAATTAAAATTCGTTGTCACAATTCGAGCATATATTCGTTTCGAAAATCG	39,
СЪ	p 3289	AAAATGACAAATTAAAATTCGTTGTCACAATTCGAGCATATATTCGTTTCGAAAATC	~
qα	b 239782	CCCGTAAATCGACACTACAATAGTCATTTAAAGGGTTACTGTATTTTTCGCTACGAGAT	239841
CP	p 3229	CCCGTAAATC	3170
d d	b 239842	TTTTGCGCGTCAAATATGTTGAGTAATGCGCATTCTCAGAATTTAGTGTTCGCATCAAC	239901
СЪ	p 3169	TTT-GCGCGTCAAATATGTTGAGTAATGCGCATTCTCAGAATTTAGTGTTCGCATCAACA	3111
qa	b 239902	AATAATTGTGTCGATCCGAT	239961
С	p 3110	GCTGGGAAATGCGTTGACTGGAG	3051
qa	239962	AACGAGATCTTGCTCTTGAGTAGATATCCTGATAAGAA	240021
CP	3050	TGAAGTGCACGCGATC	2991
QC	240022	NCACTGAAGAGGCTGTCACGGTGAACTCGGGTCGGTGAAGTGTAGCCG	240081
Cp	2990	TGAATGATGACACTGAAGAGACGCTGTCACGGTGAACTCGGGTCGGTGAAGTGTAGCGGG	2931
qq	240082	GCTTGCCGGTGACATTGGACACTCGAATTCG	240141
CP	2930	ATGCGCGCGCTCCGACGATGGCTTGCCGGTGACATTGGACACTCGAATT	2871
qΩ	240142	ATATITGAAGGAGATGTGTGTGTGTGT	240201
CP	2870	AGTCAACACTGGAAAAA-GGGATATTTGAAGGAGATGTGTGTGTGT	2812
QC	240202	TTTCGGCAAATCTACAAAATGGCCTTTTGCGCCACGAAAATTAGTGTT	240261
Cp	2811	rcgccaaa	2752
qq	240262	AATCACTCGAGCTTTCAGTAAATAAATATTTTCACTTCAAATATTTGG	240321
Сp	2751	ACTC	2692
ΩD	240322	ATTICCGATTITCGGAGGAAAAACCGTGCCGGTGGGTTGCAAAATTACG	240381
Cρ	2691	AATTICCGATTITCGGAGGAAAAACCGIGCCGGIGGGTIGCAAAATTACG	2632
qo	240382	CCGTGAGACCCTTGCTTTTGCGCCGAACTTTAAAAACCTACGATC	240440
ζb	2631	TTCCGTGAGACCCTTGCTTTTGCGCCGAACTTTAAAAACCTACGATC	2572
qq	240441	TCAAGAACTTCAGCAAGTCCTTCGTGTCCCGTAGAGCGAAGAGCATCAT	240500
СЪ	2571	TCAT	2512
qq	240501	SAACGCCACATCTCCCCGTCGTTGCACTGCTTTCACGATCTCCCGTCTCT	240560
Cp	2511	AAAACGCGTCGAACGCCACATCTCCCCGTCGTTGCACTGCTTTCACGATCTCCCGTCTCT	
qa	240561	CCACATGACTGCAAAATATTCTTTATATTATCAATTTTTTTAA	240620
СЪ	2451	GTTCCACATGACTGCAAAAATATTCTTTATATTATCAATTTTTTTAAA	2392
QQ	240621	TCACATTAATCATATCTCCATTATCACTATTCAACAC	140680
СЪ	2391	GATTAAAAACTCACATTAATCATATCTCCATTATCACTATTCAACACTT	2332

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RESULT 4

LOCUS CEY56A3 224746 bp DNA

LOCUS CAP56A3 224746 bp DNA

DEFINITION Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y56A3, WORKING DRAFT SEQUENCE.

ACCESSION AL022280

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Waterston, R.
Direct Submission
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AC006766.1 GI:4263172

AC006766.1 GI:4263172

S HTG; HTGS_PHASE1.

Caenorhabditis elegans.

Caenorhabditis elegans.

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditida;

Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

1 (bases 1 to 4917)

The caenorhabditis elegans clone
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                                                                                                                                                                                                                                                                                                                                 separate
                                                                                                                   Direct Submission

Submitted (30-DEC-1998) Nematode Sequencing Project, Sanger
Hinxton, Cambridge CB10 1RQ, UK and Department of Genetics,
Washington University, St. Louis, MO 63110, USA. E-mail:
jes@sanger.ac.uk or rw@nematode.wustl.edu
On Dec 31, 1998 this sequence version replaced gi:4006996.

IMPORTANT: This sequence is unfinished and does not necessa
represent the correct sequence. Work on the sequence is in
and the release of this data is based on the understanding
sequence may change as work continues. The sequence may be
contaminated with foreign sequence from E.coli, yeast, vect
phage etc. Order of segments is not known; 800 n's separate
segments.
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Caenorhabditis elegans clone Y44E3B, WORKING DRAFT SEQUE
unordered pieces.
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This record will be updated with the finished sequence as soon as it is available and the accession number wi
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Direct Submission
Submitted (23-FEB-1999) Genome Sequencing Center, Washin University School of Medicine, 4444 Forest Park Parkway, MO 63108, USA
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                                                                             Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; C
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/organism="Caenorhabditis elegans'

/db_xref="taxon:6239"

/chromosome="III"

/clone="Y56A3"

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Mismatches 0
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HTG: HTGS_PHASE1.
Caenorhabditis elegans.
Caenorhabditis elegans.
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Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.
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Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.
Rhiston, R., Ainscough, R., Anderson, K., Baynes, C., Berks, M.,
Soulson, A., Craxton, M., Connell, M., Copsey, T., Cooper, J.,
Coulson, A., Craxton, M., Dear, S., Du, Z., Durbin, R., Favello, A.,
Fulton, L., Gardner, A., Green, P., Hawkins, T., Hillier, L., Jier, M.,
Johnston, L., Jones, M., Kershaw, J., Risten, J., Laister, N.,
Latreille, P., Lightning, J., Lloyd, C., McMurray, A., Mortimore, B.,
O'Callaghan, M., Parsons, J., Percy, C., Rifken, L., Roopra, A.,
Saunders, D., Shownkeen, R., Sanddon, N., Smith, A., Sonnhammer, E.,
Staden, R., Sulston, J., Thierry-Mieg, J., Thomas, K., Vaudin, M.,
Vaughan, K., Waterston, R., Watson, A., Weinstock, L.,
Wilkinson-Sproat, J. and Wohldman, P.
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St. Louis, Missouri 63108,
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Missouri 63108,
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arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will
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Direct Submission
Submitted (05-MAR-1999) Department of Genetics,
University, 4444 Forest Park Avenue, St. Louis,
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                                                                                                                                                                                          /organism="Caenorhabditis elegans"
/db_xref="taxon:6239"
/clone="Y44E3B"
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                                                                                                                                                                                                                                                                                                                                        Score 71; DB 19;
Pred. No. 4.31e-32;
0; Mismatches 0
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cosmid Y44E3B
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Woessner, J., Graves, T. and
The sequence of C. elegans
Unpublished
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Waterston, R.
Direct Submission
Submitted (16-JUL-1998) D
University, 4444 Forest P
4 (bases 1 to 4917)
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University, 4444 Forest
5 (bases 1 to 4917)
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Caenorhabditis elegans
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Local Similarity 100.0%;
les 71; Conservative
                                                                                                                                                                    .4917
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/yeue- 144E3E.2
/note="contains similarity to the common central domain of tyrosinases, polyphenol oxidases and some hemocyanins (Pfam: tyrosinase.hmm, score: 97.33)"
/codon_start=1
/evidence=not_experimental
/protein_id="AAC64634.1"
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/db_xref="PID:g3329616"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This is a segment of YAC Y44E3, sequenced to span the gap between Y54E10A and W01B11. The 5' clone is Y54E10A;3' clone is W01B11, 2' bp overlap. Actual start of YAC Y44E3 is at base position 1 of CELY44E3B; actual end is at 10513 of CELK03E5
                                                                                                                                                                                                                                                                                                                                                                   with an alternate sequencing problems were covered by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ntains similarity to the basic region plus the ip domain (Pfam: bZIP.hmm, score: 15.41); codecelegans cDNA yk437c3.5; coded for by C. elegan7c3.3"
                                                                                                                                                                                                                                          sections
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in prepara
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                                                                                                                                                                                                                         this
                                                                                                                                               ac.uk
                                                                                                                                                                                                                  NOTICE: This sequence may not be the entire insert of this It may be shorter because we only sequence overlapping sectonce, or longer because we provide a small overlap between neighboring submissions.
                                                                                                                                                                                                                                                                                                                                            This sequence was finished as follows unless otherwise all regions were double stranded or sequenced with an chemistry; an attempt was made to resolve all sequencing such as compressions and repeats; all regions were covereduence from more than one subclone
                                               Washington University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .4257,4699
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1. .4917
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/strain="Bristol N2"
/db_xref="taxon:6239"
/clone="Y44E3B"
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/gene="Y44E3B.1"
complement(join(3375. .3447,3500.
/gene="Y44E3B.1"
/note="contains similarity to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NEIGHBORING COSMID INFORMATION:
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                                         Department of Genetics, Washir St. Louis, MO 63110, USA, and Sanger Centre, Hinxton Hall Cambridge CB10 IRQ, England e-mail: rw@nematode.wustl.edu
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/protein_id="AAC64635.1"
/db_xref="PID:g3329617"
/db_xref="GI:3329617"
                       Sequencing Center
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/gene="Y44E3B.2"
join(363. .637,683.
1526. .1629,2867. .3(
/gene="Y44E3B.2"
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cDNA yk437c3.3
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                        Genome
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Submitted
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COMMENT
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/translation="MYNYNYSRGNKSMGNPPRFHELTDMPDNGASTSAAAGMFTRQDS
LALAASLQQRDRERNPVDFMETQLDLDNYLQCFTDLDVPADNVDLNDAELQKANILYD
DDSYEQPQLNPYERHVAYGPGFRNPGEYEEQDGYKMNFEVKTEEEKKPETMKTSKTMT
TRRAIKRPSCYDDYQEEGETSLSDNDESVDDSYYKPKSSKKTAAAVPNFVPKTKARKY
NLKPDKEKVEPIYKLKRARNNDAVRKSRNKAKELQLQKDEEYDEMKKRITQLEAELQS
EREGRERDQQLIKQLIREKESTSKGPRKSSRNALESFNKSNY"
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Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis
1 (bases 1 to 38846)
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* NOTE: This is a 'working draft' sequence. It currently consists of 1 contigs. The true order of the pieces

* is not known and their order in this sequence record is antitrary. Gaps between the contigs are represented as a runs of N, but the exact sizes of the gaps are unknown.

* This record will be updated with the finished sequence as soon as it is available and the accession number will
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                                                                                                                                                           Length 4917
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The sequence of Caehorhabditis elegans clone
Unpublished
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/db_xref="taxon:6239"
/clone="W08E12"
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. No. 7.36e-33;
Mismatches 0;
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Pred. No. 4.31e-32;
0; Mismatches 0;
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AC006696.1 GI:4263242
HTG; HTGS_PHASE1.
Caenorhabditis elegans.
Caenorhabditis elegans.
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Waterston, R.H.
Direct Submission
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be preserved
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AUTHORS
TITLE
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gene

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Loyd,C.

Lloyd,C.

Direct Submission

L Submitted (06-NOV-1996) Louis, MO 63110, USA. E-mail:

jes@sanger.ac.uk or rw@nematode.wustl.edu

2 (bases 1 to 42724)

Wilson,R., Ainscough,R., Anderson,K., Baynes,C., Berks,M.,

Bonfield,J., Burton,J., Connell,M., Copsey,T., Cooper,J.,

Coulson,A., Craxton,M., Dear,S., Du,Z., Durbin,R., Favello,A.,

Fulton,L., Janes,M., Kershaw,J., Kirsten,J., Laister,N.,

Latreille,P., Lightning,J., Lloyd,C., McMurray,A., Mortimore,B.,

O'Callaghan,M., Parsons,J., Percy,C., Rifken,L., Roopra,A.,

Saunders,D., Shownkeen,R., Smaldon,N., Smith,A., Sonnhammer,E.,

Staden,R., Sulston,J., Thierry-Mieg,J., Thomas,R., Vaudin,M.,

Vaughan,K., Waterston,R., Watson,A., Weinstock,L.,

Wilkinson-Sproat,J. and Wohldman,P.

2.2 Mb of contiguous nucleotide sequence from chromosome III of C.

elegans

L Nature 368 (6466), 32-38 (1994)

E 94150718
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bin/display?db=wormace&class=Sequence &object=F53A2
Current sequence finishing criteria for the C. elegans genome sequencing consortium are that all bases are either sequenced unambiguously on both strands, or on a single strand with both a dye primer and dye terminator reaction, from distinct subclones.

Exceptions are indicated by an explicit note.

IMPORTANT: This sequence is NOT necessarily the entire insert of the specified clone. It may be shorter because we only sequence overlapping sections once, or longer because we arrange for a small overlap between neighbouring submissions.

This sequence is the entire insert of clone F53A2. The start of this sequence (1. .104) overlaps with the end of sequence ALO21481.

The end of this sequence (42621. .42724) overlaps with the start of sequence z99272.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 On Nov 29, 1997 this sequence version replaced gi:191431 Coding sequences below are predicted from computer analy predictions from Genefinder (P. Green, U. Washington), a available information.
                                                                                                                                                                                                                                                                Caer
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                                    complete sequence
                                                                         g2653125
281546.1 GI:2653125
HTG.
Caenorhabditis elegans.
Caenorhabditis elegans
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Ca
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .42724
      DNA
                        Caenorhabditis elegans 281546
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42724 bp
CEF53A2
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                                                                                                                                                                                                         /note="similar to Archael histone like"
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ERNKSWEDRLKKVYTFNTVSEFWALYDAIRPPSGLNALCDYNVFRDDIQPMWEVPENS
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TKDCNDDETNMRIGVVLKEKLMAASKDHSKPLFDVIRYEDHESCQKKTSSVVKAKLSL
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NCNWVIENGKAIVLTLEKINDMEWWNRFLDSDPPINTKEVKPENSKLSDLDGETRAMV
EKMMYDQRQKEMGLPTSDEKKKHDMLQQFMKQHPEMDFSNAKIG"
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1.46e-30;
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                                                                              24572. .25208
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join(24572. .24988,25071. ./gene="F53A2.5"
/note="similar to Archael h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26847. .28871
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TTACGGGCT 1467
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Wilson, R., Ainscough, R., Anderson, K., Baynes, C., Berks, M.,
Wilson, R., Ainscough, R., Connell, M., Copsey, T., Cooper, J.,
Bonfield, J., Burton, J., Connell, M., Copsey, T., Cooper, J.,
Coulson, A., Craxton, M., Dear, S., Du, Z., Durbin, R., Favello, A.,
Fulton, L., Gardner, A., Green, P., Hawkins, T., Hillier, L., Jier, M.,
Johnston, L., Jones, M., Kershaw, J., Kirsten, J., Laister, N.,
Latreille, P., Lightning, J., Lloyd, C., McMurray, A., Mortimore, B.,
O'Callaghan, M., Parsons, J., Percy, C., Rifken, L., Roopra, A.,
Saunders, D., Shownkeen, R., Smaldon, N., Smith, A., Sonnhammer, E.,
Staden, R., Sulston, J., Thierry-Mieg, J., Thomas, K., Vaudin, M.,
Vaughan, K., Waterston, R., Watson, A., Weinstock, L.,
Wilkinson-Sproat, J. and Wohldman, P.
2.2 Mb of contiguous nucleotide sequence from chromosome III of C.
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Location/Qualifiers
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all regions were double stranded or sequenced with an alternate
chemistry; an attempt was made to resolve all sequencing problems,
such as compressions and repeats; all regions were covered by
sequence from more than one subclone
                                                                                                                                                                                                                                                                                                      Caenorhabditis
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                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabdit
1 (bases 1 to 43152)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of Genetics, Washington
e, St. Louis, Missouri 63108,
29-MAY-1998
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Genome Sequencing Center
Department of Genetics, Washington University,
St. Louis, MO 63110, USA, and
Sanger Centre, Hinxton Hall
Cambridge CB10 IRQ, England
e-mail: rw@nematode.wustl.edu and jes@sanger.ac.uk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
Submitted (23-MAY-1998) Department of Ger
University, 4444 Forest Park Avenue, St.
Submitted_by:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence of C. elegans cosmid F59B1
Unpublished (1998)
3 (bases 1 to 43152)
Waterston, R.
                                  cosmid F59B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nature 368 (6466), 32-38 (1994) 94150718
CELF59B1 43152 bp
Caenorhabditis elegans c
AF067943
g3165541
AF067943.1 GI:3165541
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                                                                                                                                                                                                                                           CDS
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16526. .17717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .17717)
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                                                       3570
                                                                                                                                                                                                                                                                                                                                                                                                                         .6270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .8636
                                                                                                                   -membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ors"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
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.14872))
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                                                      .3287,3338
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6326..6558,6603..6766,6817..6879))
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                                                                                                                    n trans-
11.62)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .16900,17053.
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.14149,14558. .
                                                                                                                     seven
                                                                                                                                      score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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          .3889)
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          gene
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                                                                                                                                                                                                                                                                                                    7. .18842, .20354))
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ILWTQTDGGFIADKVLDYQESHMGNPAEDLVRLLVSTISGADRQSHWEHILEQFYTYF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .28408.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complement(join(25090. .25296,25355. .25516,25569 26091. .26724,27263. .27424,28077. .28199,28247. 28463. .28566,29655. .30312,30980. .31135))
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                                                                                                                                                                                                                                                                                                . .18503,18667
.20110,20262.
                                                                                                                                                                                                                                                                                                                                                                                   melatonin receptors
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                . .17933,18236.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 e 72; DB 21; Lone No. 7.36e-33; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                   ţ
                                                                                                                                                                                                                                                                                           complement(join(17869. .17918941. .19017,19751. .1989./gene="F59B1.7"/note="contains similarity
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                                                                                                                                                                                                                                               .20354)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 72;
Pred. No. 7
                                                                                                                                                                                                                                            complement(17869.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             annotations omitted.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13826
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .17121,17595.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    .6270,
                                                                                      s-membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           receptors"
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                        .3287,3338
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                                                                                                   seven
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9707. .9955,10007. .10225))
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                                                                                                                      score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   .65. .5727,5810
.6766,6817. .68
                       333. 3071,3121
3889))
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C
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                                                                                                                                                                                                                                                                                                                                                                                                      complement(5565..6879)
/gene="F59B1.5"
complement(join(5565..5727,
6326..6558,6603..6766,6817
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/note="contains similarity t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16526. .17717

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join(16526. .16623,16705. ./gene="F59B1.2"

/codon_start=1
                                                                                                similarity: 7tm_1.hmm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  score:
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complement(join(2823.
3617. .3780,3827. .388
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                                                                                                                 receptors (Pfam:
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oxidored_q1.hmm,
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Missouri 63108, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                using
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                                                                                                                                                                  Eukalyola; metazoa; Mematoua, Secendente Annabatta, Anabattina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis. Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis. Wilson, R., Ainscough, R., Anderson, K., Baynes, C., Berks, M., Bonfield, J., Burton, J., Connell, M., Copsey, T., Cooper, J., Coulson, A., Graxton, M., Dear, S., Duzin, R., Favello, A., Fulton, L., Jones, M., Kershaw, J., Risten, J., Hillier, L., Jier, M., Johnston, L., Jones, M., Kershaw, J., Risten, J., Laister, N., Laister, N., Lightning, J., Lloyd, C., Rifken, L., Roopra, A., O'Callaghan, M., Parsons, J., Percy, C., Rifken, L., Roopra, A., Saunders, D., Shownkeen, R., Smaldon, N., Smith, A., Sonnhammer, E., Staden, R., Sulston, J., Thierry-Mieg, J., Thomas, K., Vaudin, M., Watson, A., Weinstock, L., Waterston, R., Watson, A., Weinstock, L., Wilkinson-Sproat, J. and Wohldman, P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence was finished as follows unless otherwise noted: all regions were double stranded or sequenced with an alternate chemistry; an attempt was made to resolve all sequencing problems such as compressions and repeats; all regions were covered by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         clone
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at 43152
                                                                                                                                                                          Caenorhabditi
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                                                                                                                                                     Rhabditida
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NOTICE: This sequence may not be the entire insert of this It may be shorter because we only sequence overlapping sectonce, or longer because we provide a small overlap between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oţ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genome Sequencing Center
Genome Sequencing Center
Department of Genetics, Washington University
St. Louis, MO 63110, USA, and
Sanger Centre, Hinxton Hall
Cambridge CB10 IRQ, England
e-mail: rw@nematode.wustl.edu and jes@sanger
                                                                                                                                                      Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e predicted from computer Green and L. Hillier, ms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genetics,
St. Louis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEIGHBORING COSMID INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nature 368 (6466), 32-38 (1994) 94150718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Coding sequences below are the program Genefinder(P. C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complement (2823.
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Submitted (23-MAY-1998)
University, 4444 Forest
Submitted by:
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                                                                                                        Caenorhabditis elegans
                                                        GI:3165541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence of C. el. Unpublished (1998)
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                                                                                                                                  Caenorhabditis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Waterston, R
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            AF067943
g3165541
AF067943.1
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AUTHORS
TITLE
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                                                                                    KEYWORDS
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                                                           VERSION
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                                                                                                           SOURCE
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.17717)

Caenorhabditis elegans.

Caenorhabditis elegans.

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditida; Rhabditida;

Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

I (bases 1 to 48088)

S Wilson,R., Ainscough,R., Anderson,K., Baynes,C., Berks,M.,

Bonfield,J., Burton,J., Connell,M., Copsey,T., Cooper,J.,

Coulson,A., Craxton,M., Dear,S., Du,Z., Durbin,R., Favello,A.,

Fulton,L., Gardner,A., Green,P., Hawkins,T., Hillier,L., Jier,M.,

Johnston,L., Jones,M., Kershaw,J., Kirsten,J., Laister,N.,

Latreille,P., Lightning,J., Lloyd,C., McMurray,A., Mortimore,B.,

Callaghan,M., Parsons,J., Percy,C., Rifken,L., Roopra,A.,

Saunders,D., Shownkeen,R., Smaldon,N., Smith,A., Sonnhammer,E.,

Staden,R., Sulston,J., Thierry-Mieg,J., Thomas,K., Vaudin,M.,

Vaughan,K., Waterston,R., Watson,A., Weinstock,L.,

Wilkinson-Sproat,J. and Wohldman,P.

2.2 Mb of contiguous nucleotide sequence from chromosome III of C.

S

Nature 368 (6466), 32-38 (1994) 94150718

JOURNAL MEDLINE REFERENCE

TITLE

AUTHORS

TITLE

Caenorhabditis elegans

ORGANISM

KEYWORDS

SOURCE

REFERENCE AUTHORS

GI:3886084

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NCNLPYVDFGWYFGVNTSADCDVIRFYVDFCKDFGVVALIAIVDVGTIVMIKVTAPGM
KLLSANCAQSQKKRQREITFVKQALIQGAVFATELVFFEIISGMQSQPVAIFLCTTVA
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FETCKLECRKQRDAVQAADYVEQLRRELASAQAALDAENAPVVNAHHAQAQHVEPVDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3. .25672,
.28408,
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TLKMMLSESGIKGIFEQCRNLERSRFGEKVDRIEEKRNEILDFEKAFNLNKVVGIKQN
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QQILEQFYSYFLNELGSGEAPYTLEQLKLSFKLYFPVGALALLPLFGPAVDAKLEGMD
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EAHVHAHFEKSCQKGHNLEVEFCEAFGHLEGLLLPKVFFSQKFEEDNPNKGFVGMEFV
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LKGIFDQSRNIDQKLSEKVERIEQNHKEILNLETVLNLNKVVGIDQKVICHGDLWAAN
ILWTQTDGGFIADKVLDYQESHMGNPAEDLVRLLVSTISGADRQSHWEHILEQFYTYF
TDEIGSNNAPYTLEQLKTSFKLYFPVGALTLISLFGPAVDMKLQGMESGKAENYRRIV
IEKVDCLLDDVLNFHDFNKKFTGKN"
                                                                                                                                                                                                                                                                                                                                             567. .18842,
2. .20354))
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                                                                                                                                                                                                                                                                                                                                                                                                                                          to melatonin receptors"
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                                                                                                                                                                                                                                                               complement(17869. 20354)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'codon_start-1
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                          Length 43152;
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                        re 72; DB 21; Le
1. No. 7.36e-33;
Mismatches 0;
                        Score 72;
Pred. No.
0; Misma
  annotations omitted
                        Match 0.9%;
Local Similarity 100.0%;
les 72; Conservative
  ō
Note: remainder
                       Query Match
                                             Matches
                                                                   13964
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CCCGTAAATCGACACAAGCGCTACAGTAGTCATTTAAAGAATTACTGTAGTTTTCGCTA 1465 ဌ

1406

GAGATATTTGC 14035 14024 d

CELY44E3A 48088 bp DNA Caenorhabditis elegans cosmid Y44E3A AF106589 g3886084 1394 11 LOCUS DEFINITION ACCESSION NID 1405 RESULT Sp

Submitted (05-MAR-1999) Department of Genetics, Washington University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, Submitted by: Washington Missouri 63108, and jes@sanger.ac.uk Genome Sequencing Center
Department of Genetics, Washington University,
St. Louis, MO 63110, USA, and
Sanger Centre, Hinxton Hall
Cambridge CB10 IRQ, England
e-mail: rw@nematode.wustl.edu and jes@sanger.a Waterston, R.
Direct Submission
Submitted (15-NOV-1998) Department of Genetics,
University, 4444 Forest Park Avenue, St. Louis,
4 (bases 1 to 48088) 2 (bases 1 to 48088) Woessner, J., Graves, T. and Keppler, D. The sequence of C. elegans cosmid Y44E3A Unpublished (bases 1 to 48088) Direct Submission Waterston, R REFERENCE AUTHORS REFERENCE JOURNAL JOURNAL AUTHORS TITLE COMMENT

clone sections this NOTICE: This sequence may not be the entire insert of this It may be shorter because we only sequence overlapping sectonce, or longer because we provide a small overlap between neighboring submissions. This sequence was finished as follows unless otherwise noted: all regions were double stranded or sequenced with an alternate chemistry; an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by sequence from more than one subclone

NEIGHBORING COSMID INFORMATION:

This segment of YAC Y44E3 was sequenced to span the gap between W01B11 and W05F2. The 5' clone is W01B11, 200 bp overlap;3' clor is W05F2, 2300 bp overlap. Actual start of YAC Y44E3 is at base position 1 of CELY44E3B; actual end is at 10513 of CELK03E5

FEATURES

.1999

05-MAR-

INV

Coding sequences below are predicted from computer analysis, using the program Genefinder(P. Green and L. Hillier, ms in preparation) the program Genefinder(P. Green Location/Qualifiers

/organism="Caenorhabditis elegans"
/strain="Bristol N2" .48088

.37362,

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HEFFLEXENUMARTHAGGREYEIRKLEGINAILISTRNMILSCEKKNECKLESD"

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complement(join(38013. .38053.38102. .38209,39472. .39618,39472. .4060,40788. .41107,42027. .42464,42892. .43024,43942. .44060,40788. .41107,42027. .42464,42892. .446074,43942. .44060,40788. .41107,42027. .42500,45946. .46074,43942. .44060,40788. .41107,42027. .42500,45946. .46074,43942. .44060,40788. .41107,42027. .42600,45946. .46074,43942. .44060,40788. .41107,42027. .42600,45946. .46074,43942. .44060,40788. .41107,42027. .42600,45946. .46074,43942. .44060,40788. .401074. .47218,47852. .47997))

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for by C. elegans cDNa C. elegans cDNa yk25793.5; coded
for by C. elegans cDNa C. elegans cDNa yk25895.5; coded
for by C. elegans cDNa yk133b11.5; coded for by C. elegans
cDNa yk268-7. .
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HEIFLFSLNNARTMAQREYEIRKLEGINAIIISTRNMILSCEKKNECKLFSD"
NITNKNCGDAGWFEGELHGKKGLFPDNFVELVQVPLGTESGARHGSISRQATLTFVSH
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                                                                                                                        .37228,37293.
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                                                                                                                          .36658,37128.
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Pred. No. 7.36e-
0; Mismatches
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                                                                                                                             .35973,36584.
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                                                                                                                                             37414. .37479)
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                                                               35821. .37479 /gene="Y44E3A.
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37414. .3747
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larity 100.0%;
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VLFLENMSNVLKITLNLKVVAPEKVASIQKPDQRDRSSTGESTTGEPSIDSATDOVA
ELQHITKNRARPPRNRPMSMVMNRNRSSDESPNGFLSSPTSISTVNPMSASMFVPATA
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complement(join(23897. .28065))
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/note="Contains similarity to Srr b-r-representations similarity to Srr B-representations similarity structures similarity 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NGCLADOCLALRWVHENIGAFGGDRSRVTLFGESAGSASTTAHLFAPNSHKYFRNIIA
KSGSIINSWASATPPTMLDLSFRLAKKVNCSSPDMNAIVKCLRSVPAHLVQAEADNIS
GDIGPPMTFAYVPVSSDANFFQGDVFQKLANKQFKKDVNIIFGSVKDEGTYWLPYYMS
LPKYGFAFNHTISAEDPHNRALITRDHYEESMRAFMPYFAGSKLVLNAFMNSYEHVST
SNVPEERYRDGVARFLGDLFFTCSLIDFADLISDNIFGNVYMYYFTYRSSANPWPKWM
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SCOFE=99.8, E=9.3e-29, N=1)"
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LKSTGAVGMFPTNFV
PKAIDRTPSTIISDP
QHDDELALKEIDMLI
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/translation="MSIAIKDDDEFKTIFAEKKTOPVILFFTASWCGPCQMIKPRVEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DCLNMNIWVPEDHD
FGFLYFGDDSPIQG
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.20997, 213
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EMIDRWSGELEARTLAKTCYLTIDSAFPQFFGAEMWNPPGAISEI
GSVMVWIYGGGFFSGTPSLDLYSGSVFAAKEHTIVVNVNYRLGPI
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.4341))
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E=4.9e-106, N=1)"
                                                                                                                                                                 6. .795,1321.
.3881,4294. .
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21379. .21417))
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complement(join(516.
3398. .3573,3678. .36
     /db_xref="taxon:6239
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              complement(17307.
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Score=363.2, E=-/
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AUTHORS
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Caenorhabditis elegans clone Y39H10, WORKING DRAFT SEQUENCE, 6
unordered pieces.
NAC006752
94309798
AC006752.2 GI:4309798
HTG; HTGS_PHASE1.
Caenorhabditis elegans.
SM caenorhabditis elegans
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditioidea; Rhabditidae; Peloderinae; Caenorhabditis.

E (bases 1 to 245805)
S Waterston, R.H.
The sequence of Caehorhabditis elegans clone
L Oppublished
                                                  Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis
1 (bases 1 to 178553)
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arkway, St. Louis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                   Washington
Irkway, St.
                                                                                                                                                                                                                                             NOTE: This is a 'working draft' sequence. It currently consists of 3 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                         Waterston, R.H.
Direct Submission
Submitted (24-FEB-1999) Genome Sequencing Center, Washing University School of Medicine, 4444 Forest Park Parkway,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (23-FEB-1999) Genome Sequencing Center, Washin
University School of Medicine, 4444 Forest Park Parkway,
MO 63108, USA
On Mar 1, 1999 this sequence version replaced gi:4263186
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28 others
                                                                                                                                                                                                                                                                                                                                                                                                        35017: contig of 35017 bp in length
35031: gap of unknown length
82926: contig of 47895 bp in length
82940: gap of unknown length
178553: contig of 95613 bp in length
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                                                                                      l (bases i co rocco).
Waterston, R. H.
The sequence of Caehorhabditis elegans clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Caenorhabditis elegans/db_xref="taxon:6239"
/clone="Y67D8y"
1 34476 c 33852 g 55384 t 28
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Pred. No. 7.36e-33;
0; Mismatches 0;
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1. .178553
HTG; HTGS_PHASE1.
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Waterston,R.H
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Direct Submission
Submitted (23-FEB-1999) Genome Sequencing Center, Washington University School of Medicine, 4444 Forest Park Parkway, St. I MO 63108, USA
On Mar 1, 1999 this sequence version replaced gi:4263186.
* NOTE: This is a 'working draft' sequence. It currently consists of 6 contigs. The true order of the pieces and theorem the contigs are represented as arbitrary. Gaps between the contigs are represented as truns of N, but the exact sizes of the gaps are unknown.
* This record will be updated with the finished sequence as soon as it is available and the accession number will
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Caenorhabditis elegans clone Y39H10, WORKING DRAFT SEQUENCE,
unordered pieces.
AC006752
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/organism="Caenorhabditis elegans" /clone="Y39H10"
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Caenorhabditis elegans.
Caenorhabditis elegans.
Caenorhabditis elegans
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditis
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae;
1 (bases 1 to 245805)
Waterston, R.H.
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Unpublished
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Best Local Similarity 100.0%;
Matches 72; Conservative
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licine, 4444 Forest Park Parkway, St. Louis,
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SEQUENCE,
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Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; C
1 (bases 1 to 298195)
Waterston, R. H.
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f unknown length
g of 13665 bp in length
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g of 56220 bp in length
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g of 161470 bp in length
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                                                                                                                      /organism="Caenorhabditis elegans"
/db_xref="taxon:6239"
/clone="Y39H10"
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1. No. 7.36e-33;
Mismatches 0;
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Direct Submission
Submitted (24-FEB-1999) Genome
University School of Medicine,
MO 63108, USA
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14420: gap of un

28085: contig of

6 28100: gap of un

84320: contig of

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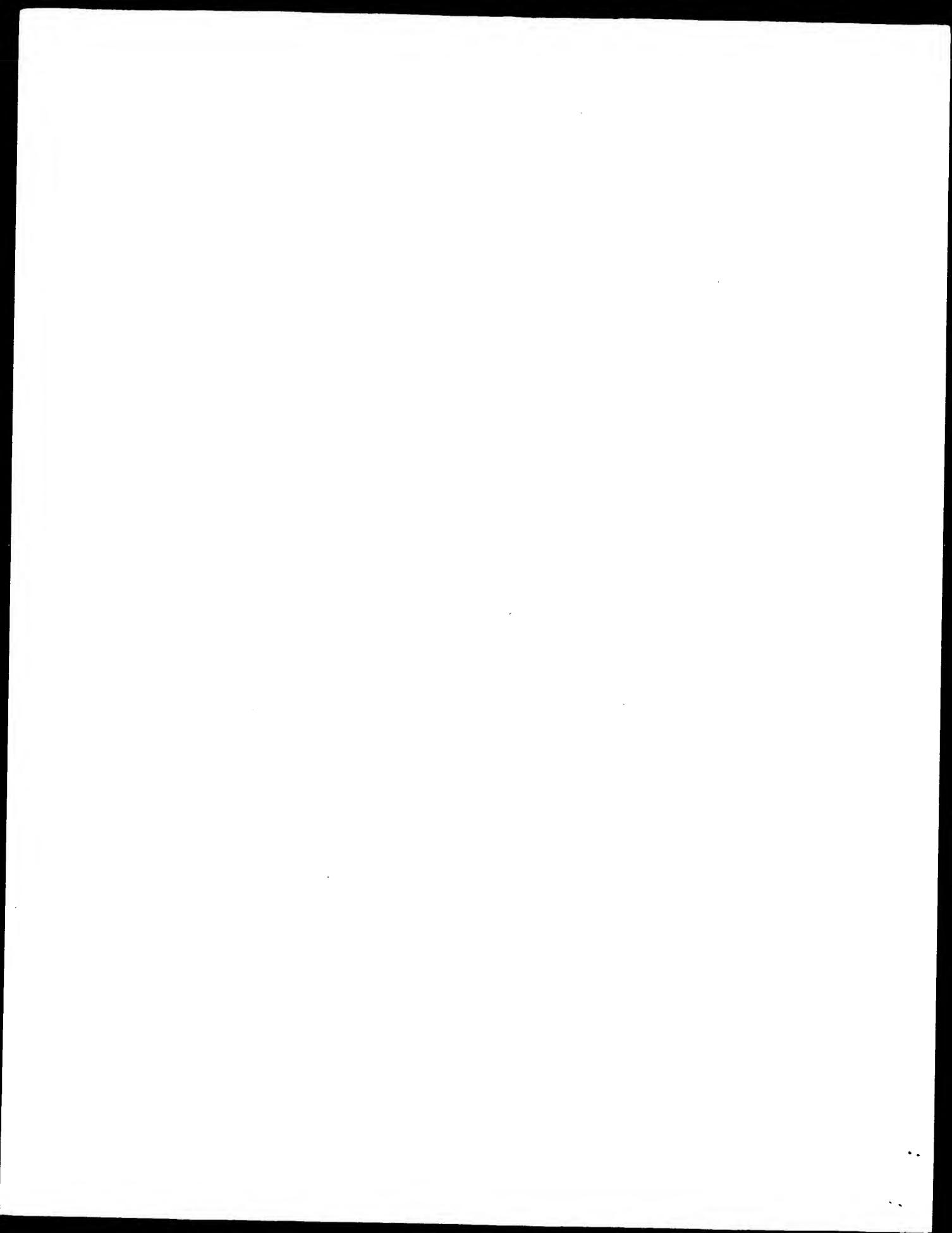
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Pred. No. 7.36e-33;
0; Mismatches 0;
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algorithm using Smith-Waterman database search, n.a. n.a. MPsrch_nn

updates/sec MasPar time 1622.43 Seconds 1010.719 Million cell update 9 00:23:43 1999; Mon Aug Run on:

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Title:

>US-08-287-669-18 (1-7653) from US08287669.seq (10 of 7653 Description: Perfect Score: N.A. Sequence:

....ATTCTGGTCAGCAAAGATCT 1 AGATCTGAAATAAGGTGATA.....
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TABLE jmetric Gap 60 Scoring table:

Comp:

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Post-processing: Minimum Match 0% Listing first 1000 summaries

Database

n-geneseq35
1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7
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scale 2.350 Variance 3.852; Mean 9.051; Statistics:

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D T38196 standard; DNA; 7655 p. .
C T38196;
J1 17-DEC-1996 (first entry)
JE Nematode Ced-3 gene.
KW Ced-3; interleukin-1 beta converting enzyme; ICE; protease;
KW cell death; apoptosis; neural degeneration; inflammation;
KW antiinflammatory; ds.
OS Caenorhabditis elegans.
FH Key
Location/Qualifiers
FT repeat_unit 1356.1472
FT repeat_unit 1400.1614
FT repeat_unit 1400.1614
FT Codon_start= 2232..2234
cDNA encoding rat cyt
Human cathepsin K gen
Polycystic kidney dis
Polycystic kidney dis
Mus musculus dystroph
Human PKD1 cDNA.

Polycystic kidney dis
Mouse butyrophilin ge
Human cathepsin K gen
CEA genomic clone.

PKS 741 insert contg.

PKS 741 insert contg.

PKS 741 insert contg.

RKS 741 insert contg.

CATCINOEMDRYONIC anti
DNA encoding Factor-V
Bacterial artificial
Shuttle vector pAdDel
Staphylococcus aureus
Human flavin-containi
Mouse syndecan-1 gene
Mouse syndecan-1 enco
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Mouse poly Ig recepto
Calpain large subunit
Recombinant adenoviru
Recombinant cis-actin
Human c-fms oncogene.
MAGE-B cluster DNA se
Insert from cosmid 10
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Human PKD1 gene.

Human PKD1 locus betw

NC-contig derived fro

HC-contig derived fro

Hereditary haemochrom
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Mouse syndecan g
Mouse poly Ig re
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  T96631
V09660
T08807
Q91438
V18885
T94102
T13821
V05159
V05159
V05159
V051685
T43574
V15693
V52967
V52967
V57272
T08126
V83948
T27558
V74475
V57272
T08126
V15946
V15940
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                     G65R mutation"
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Claim 18; Fig 3; 139pp; English.

Claim 18; Fig 3; 139pp; English.

Che Caenorhabditis elegans ced-3 gene (T38196) was cloned by mapping RFLPs and chromosome walking, and genomic DNA cloned in plasmid pJ107 was sequenced. EMS-induced alleles were also sequenced. The gene codes for a cell death protein (R98754) that is structurally similar to human interleukin-1 beta converting enzyme (ICE) (R98755), suggesting that Ced-3 protein may be a cysteine protease like ICE and that ICE may be a human equivalent of the nematode cell death gene. The ced-3 gene can be used as a convening or inhibiting the activity of ICE, ced-3 and related enhancing or inhibiting the activity diseases and/or diseases caused by cell death. Novel inhibitors of ced-3 activity include portions of the ced-3 gene and it product.

Secused by cell death, Novel inhibitors of ced-3 activity include cenenence 7653 BP; 2429 A; 1456 C; 1270 G; 2498 T;
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23-FEB-1996; U02473.
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WPI; 96-425082/42.
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ΩÞ	5341	40
δλ	5341	ggacaataaaccttcctaatcaccaaaaagtaaaattgaaatcttcgaaaagccaaaaa 540
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qq	5701	76
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Disclosure; Fig 3; 132pp; English.

Disclosure; Fig 3; 132pp; English.

This sequence encodes the C.elegans cell death gene, ced-3. Fragments of the amino terminal of the protein encoded by this sequence act as inhibitors of ced-3. This gene has considerable similarity to human interleukin-lbeta convertase (ICE), which converts pro-interleukin-lbeta convertase (ICE), which converts pro-interleukin-leukin-lbeta convertase (ICE), which converts pro-interleukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin-leukin
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Horvitz HR, Shaham S, Yuan J;
WPI; 94-007551/01.
P-PSDB; R45262.
Agents which affect activity of cell death genes - used to develop drugs for treating conditions characterised by cell death or proliferation.
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14-JUN-1993; U05705.
12-JUN-1992; US-897788.
20-NOV-1992; US-984182.
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C. elegans; ced-4; ced-3; mutant; transcriptional regulation; embryogenesis; cell death; hydrophilic; transmembrane; region; hydrophobic; mutation; amino acid; substitution; RNA splicing; protein synthesis; null phenotype; calcium-binding domain; ss. Caenorhabditis elegans.
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Q54666 standard; DNA; 7653 BP
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Isolated C elegans cell death genes ced-3 and ced-4 - used to
develop agents to increase or prevent cell death in organisms
Claim 2; Fig 4; 127pp; English.
This sequence represents the C. elegans ced-3 gene. A 2.8 kb mRNA
was identified as the ced-3 transcript and was most abundant in
embryos, but was also detected in larvae and young adults, suggesting
that ced-3 is expressed not only in cells undergoing cell death. The
contain repetitive elements, some of which have been characterised
in non-coding regions of other C. elegans genes, such as fem-1, lin-12
and myob. The Ced-3 protein is 503 amino acids in length. Ced-3 is
highly hydrophilic with no significant hydrophobic region that might
be a transmembrane region. One region of Ced-3 is very rich in serine.
It is thought that this region is involved in protein-protein inter-
actions, similar to acid blobs in transcription factors. Of the
mutations which occur within the ced-3 gene, eight of the mutations
are missense mutations, two are nonsense mutations and two are putative
splicing mutations (see also 064735-45). These mutations establish the
function is not essential for viabillity. The ced-3 and ced-4 gene
characterised by cell deaths, such as myocardial infarction, stroke,
characterised by cell deaths, such as myocardial infarction, stroke,
infection, aging or hair loss.
Sequence 7653 BP; 2429 A; 1453 C; 1272 G; 2499 T;
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Pred. No. 0.00
0; Mismatch
23-DEC-1993.
14-JUN-1993; U05701.
12-JUN-1992; US-897788.
20-NOV-1992; US-979638.
(MASI ) MASSACHUSETTS INST TECHNOLOGY.
Horvitz HR, Shaham S, Yuan J;
WPI; 94-007542/01.
P-PSDB; R47466.
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larity 99.8%;
Conservative
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7639; Conse
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Best Local
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ογ	4441	TTCGACGAGAAACCATGTACAGAAACTTC
qq	4501	aataatgaacactttgagcagatgccaacacggaatggtaccaaggcc
Qy	4501	CCTCATCATAATAATGAACACTTTGAGCAGA
qq	4561	aaggacaatcttaccaatttgttcagatgcatgggctatacggttatttgcaaggac
Oy	4561	ACAATCTTACCAATTTGTTCAGATGCA
ΩD	4621	cgaaatttgccattttgc
QY	4621	TCTGACGGGAAGGGTACGGCGAAATTATATTACCCAAACGCGAAATTGCCAT
QQ	4681	cgaaaatgtggcgcccggtctcgacacgacaatttgtgtttaaatgcaaaatgtataa
Qy	4681	GAAAATGTGGCGCCCGGTCTCGACACGACAATTTGTGTTAAATGCAAA
qa	4741	aaaaacaaaattttgaacttccgcgaaaatgatttacctagtttcgaaatttt
QY	4741	GCAAAAAACAAATTTTGAACTTCCGCGAAAATGATTTACCTAGTTTCGAAATT
qq	4801	gttttttccggctacattatgtgtttttttttttttttt
Qy	4801	TTTTTCCGGCTACATTATGTGTTTTTTTCTTAGTTTTTCTATAATATTTGATGTAAA
QQ	9	accgtttgtaaattttcagacaattttccgcatacaaaacttgatagcacgaaatcaatt 4920
Ολ	4861	CCGTTTGTAAATTTTCAGACAATTTTCCGCATACAAAACTTGATAGCACGAAATCAAT

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D 064741 standard; DNA; 7653 BP.

C. 064741;

T 23-JUN-1994 (first entry)

E ced-3 (G6372A) gene.

W C. elegans; ced-4; ced-3; mutant; transmembrane; region; mutation; amino acid; substitution; RNA splicing; protein synthesis; null phenotype; calcium-binding domain; ss.

Caenorhabditis elegans.

Key
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Cream 14; F19 4; 12/PP; EUGITENT.

The sequences given in Q64735-45 represent mutations of the C. elegans Ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young adults, suggesting that ced-3 is expressed not only in cells undergoing cell death. The four largest introns as well as sequences 5' of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such as fem-1, lin-12 and myob. The Ced-3 protein is 503 amino acids in cengion that might be a transmembrane region. One region of Ced-3 is nighly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of Ced-3 is protein interactions, similar to acid blobs in transcription protein interactions, similar to acid blobs in transcription factors. Of the mutations which occur within the ced-3 gene, eight of the mutations are missense mutations. These mutations extablish the nutations are missense mutations. These mutations establish the products may be used to develop agents for treating conditions characterised by cell deaths, such as myocardial infarction, stroke, degenerative disease, traumatic brain injury, hypoxia, pathogenic
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2430 A:
                                                          Isolated C elegans cell death develop agents to increase or Claim 14; Fig 4; 127pp; Englis
20-NOV-1992; US-979638.
(MASI ) MASSACHUSETTS INST
Horvitz HR, Shaham S, Yua
WPI; 94-007542/01.
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Best Local Similarity 99.8%;
Matches 7636; Conservative
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7653 BP; 24
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ced-3 (C6434T) gene.
C. elegans; ced-4; ced-3; mutant; transcriptional regulation;
embryogenesis; cell death; hydrophilic; transmembrane; region;
hydrophobic; mutation; amino acid; substitution; RNA splicing;
protein synthesis; null phenotype; calcium-binding domain; ss.
Caenorhabditis elegans.
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Q64742;
23-JUN-1994 (first entry)
ced-3 (C6434T) gene.
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23-DEC-1993.
14-JUN-1993; U05701.
12-JUN-1992; US-897788.
20-NOV-1992; US-979638.
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Isolated C elegans cell ueals yelles cell death in organisms

develop agents to increase or prevent cell death in organisms

Claim 14: Fig 4: 127pp: English.

The sequences given in 064735-45 represent mutations of the C. elegans

Ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and

was most abundant in embryos, but was also detected in larvae and young
adults, suggesting that ced-3 is expressed not only in cells undergoing

cell death. The four largest introns as well as sequences 5' of the

start codon contain repetitive elements, some of which have been

characterised in non-coding regions of other C. elegans genes, such

as fem-1, lin-12 and myOD. The Ced-3 protein is 503 amino acids in

characterised in non-coding regions of other C. elegans genes, such

as fem-1, lin-12 and myOD. The Ced-3 protein is 503 amino acids in

characterised in nerramembrane region. One region of Ced-3 is

region that might be a transmembrane region. One region of Ced-3 is

very rich in serine. It is thought that this region is involved in

protein-protein interactions, similar to acid blobs in transcription

credion that missense mutations. These mutations and

two are putative splicing mutations. These mutations establish the

characterised by cell deaths, such as myocardial infarction, stroke,

degenerative disease, traummatic brain injury, hypoxia, pathogenic
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Pred. No. 0.0
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Sequence 7653 BP; 2429 A;
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larity 99.8%;
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Isolated C elegans
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oy Oy	661	accactccatcaccttttggcggtgttcttcgaaacccacttaggaaagcagtgtgtat 720
5; pp	721	caatttcaatgctttaaac 78
QQ	σ .	gcaaatgacggggttggaatcttagatga 84
ò i	ω .	TCCAAATCGCATTATATTTGTGCATGGAGGCAAATGACGGGGTTGGAATCTTAGATG
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δ	0.2	IGCTGCTACAATCCACTTTCTTTTCTCATCGGCAGTCTTACGAGCCCATCATAA
o y	1081	ttttttttcgggaaatttgcaataaaccggccaaaactttctccaaattgttacgcaa 1140
Oy Oy	1141	tatatacaatccataagaatatcttctcaatgtttatgatttcttcgcagcactttctct 1200
do yo	1201	togtgtgctaacatcttatttttataatatttccgctaaaattccgatttttgagtatta 1260
qq	1261	attatgataatagcaccgaaaactactaaaaatggtaaaagctccttt 132
ογ	1261	TCGTAAATTATCATAA
Oy Oy	1321	taaatcggctcgacattatcgtattaaggaatcacaaaattctgagaatgcgtactgcgc 1380
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qo	4 ,	gatttacgggctcaatttttgaaaataattttttttttcgaattt 150
ò a	4 (IAGCGCTTGTGTCGATTTACGGGCTCAATTTTTGAAAATAATTTTTTTT
Q Å	1501	tgataacccgtaaatcgtcacaacgctacagtagtcatttaaaggattactgtagttcta 1560
g &	1561	gctacgacatattttgcgcgccaaatatgactgtaatacgcattctctgaattttgtgtt 1620
do Oy	1621	gcacaggatttattcca 168
QQ .	1681	gracggaaaaagtttgatagacttttaaattctccttgcatttttaattc 174

QY	1681	ATGGGTCTCGGCACGCAAAAGTTTGATAGACTTTTAAATTCTCCTTGCATTTTTAÄTTC	1740
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QΥ	1741		1800
q 0	80	ttccaggctgacaaacagaaacaaaaacacaacaacattttaaaaatcagttttcaaat	186
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QY	1981	TCAAGAG	2040
QQ	2041	gataaaaattactcaaatc	2100
ΟŸ	2041	CAGTTGTTGGAGTTTTTGACGAAAACTAGGAAAAAAAAATCGATAAAAATTACTCA	2100
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QY	2221	TCAGCCGAAGATGATGCGTCAAGATAGAAGGAGCTTGCTAGAGAGGAACATTATGATG	2280
qq	2281	+ - - -	2340
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qq	2701	aaagctcgagtgattatttatttttaacacta	2760
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QY	2761	TTTTCGTGGCGCAAAAGGCCATTTTGTAGATTTGCCGAAAATACTTGTCACACACA	2820

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618 618	1 aaattaaaaattgattttttcaattttttcgaaaaatattccgattattttatattcttt 62.1
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678 678	1 aacgaaatttatcgatttttaaatgtaaaaaaaaatagcgaaaattacatcaaccatcaa 6840
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Db 708. Qy 708.	<pre>1 actcgtgattcattgcccaattgataattgtctgtatcttcccccagttctttcgt 7140 </pre>
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064744;
23-JUN-1994 (first entry)
ced-3 (G6536A) gene.
C. elegans; ced-4; ced-3; mutant; transcriptional regulation; embryogenesis; cell death; hydrophilic; transmembrane; region, hydrophobic; mutation; amino acid; substitution; RNA splicing, protein synthesis; null phenotype; calcium-binding domain; ss Caenorhabditis elegans.
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(MASI ) MASSACHUSETTS INST TECHNOLOGY.
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develop agents to increase or prevent cell death in organisms claim 14; Fig 4; 127pp; English.

The sequences given in Q64735-45 represent mutations of the C. elegans ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young adults, suggesting that ced-3 is expressed not only in cells undergoing cell death. The four largest introns as well as sequences 5' of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such as fem-1, lin-12 and myob. The Ced-3 protein is 503 amino acids in chength. Ced-3 is highly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of Ced-3 is night be a transmembrane region. One region of Ced-3 is very rich in serine. It is thought that this region is involved in protein-protein interactions, similar to acid blobs in transcription the mutations emutations. These mutations and two are putative splicing mutations. These mutations and two are putative splicing mutations. These mutations establish the null phenotype of the ced-3 gene, confirming that ced-3 and ced-4 gene characterised by cell deaths, such as myocardial infarction, stroke, degenerative disease, traumatic brain injury, hypoxia, pathogenic infection, aging or hair loss.

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C. elegans; ced-4; ced-3; mutant; transcriptional regulation;
embryogenesis; cell death; hydrophilic; transmembrane; region;
hydrophobic; mutation; amino acid; substitution; RNA splicing;
protein synthesis; null phenotype; calcium-binding domain; ss.
Caenorhabditis elegans.
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(MASI ) MASSACHUSETTS INST TECHNOLOGY.
Horvitz HR, Shaham S, Yuan J;
WPI; 94-007542/01.
P-PSDB; R53286.
Isolated C elegans cell death genes ced-3 and ced-4 - used to develop agents to increase or prevent cell death in organisms claim 14; Fig 4; 127pp; English.
The sequences given in Q64735-45 represent mutations of the C.
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ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young adults, suggesting that ced-3 is expressed not only in cells undergoing cell death. The four largest introns as well as sequences 5' of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such as fem-1, lin-12 and myoD. The Ced-3 protein is 503 amino acids in length. Ced-3 is highly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of Ced-3 is very rich in serine. It is thought that this region is involved in protein-protein interactions, similar to acid blobs in transcription factors. Of the mutations which occur within the ced-3 gene, eight of the mutations are missense mutations, two are nonsense mutations and two are putative splicing mutations. These mutations establish the null phenotype of the ced-3 gene, confirming that ced-3 and ced-4 gene function is not essential for viabillity. The ced-3 and ced-4 gene products may be used to develop agents for treating conditions characterised by cell deaths, such as myocardial infarction, stroke, degenerative disease, tranmatic brain injury, hypoxia, pathogenic
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7 AG A	64	gcaacccaccggcacggtttttcctccgaaaatcggaaattatgcactttcccaaatat	2700
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QY	4021	TITATIGATAATTATAGATGITAATAAGCATATCTTGAATGAAAGTCAGCAAAAATATGT 4080
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qq	4741	aacttccgcgaaaatgatttacctagtttcgaaatttt
ΟŊ	4741	AACAAAATTTTGAACTTCCGCGAAAA
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QY	4801	GCTACATTATGTGTTTTTTCTTAGTTTTTCTATAATATTTGATGTAAAA
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Qy	4981	GTGTTTCAATATGAAATGTATTTTTAAAAACTTTAAAAACCAC
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QQ	6421	caaaggatatggatgtt
ΟŸ	6421	TCTCGACACGCAAAGGATATGGATGTTGTTGAGCTGCTGACTGA
QQ	6481	ttgtggatttcagacatcacagggatcgaatattttgaaacagatgccagaggta 654
ΟŊ	6481	TCGCTTGTGGATTTCAGACATCACAGGGATCGAATATTTTGAAACAGATGCCAGAGGT
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ΟŸ	6661	AATATTTTATGCTAATTTTTTGCGTTAAATTTTTGAAATAGTCACTATTTATCGGGTT
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QY	6721	CAGTAAAAAATGTTTATTAGCCATTGGATTTTACTGAAAAACGAAAATTTGTAGTTTTT
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ΟY	6841	ATTTAAGCCAAAATTGTTAACTCATTTAAAAATTAATTCAAAGTTGTCCACGAGTAT
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QΫ	7141	CAATTAGTTTAAAACCATGTGTATATTGTTATCCTATACTCATTTCACTTTATCATTC
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Qγ	7201	TCATTICICITCCCATTITCACACATTICCATTICTCTACGATAATCTAAAATTATGA
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7261 gtttgtgtctcgaacgcataatattttaataactcgttttgaatttgatttgttgt 7320

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                                                                   ced-3 (C6322T) gene.

ced-3 (C6322T) gene.

C. elegans; ced-4; ced-3; mutant; transcriptional regulation; embryogenesis; cell death; hydrophilic; transmembrane; region; hydrophobic; mutation; amino acid; substitution; RNA splicing; protein synthesis; null phenotype; calcium-binding domain; ss. caenorhabditis elegans.

Location/Qualifiers

Key

Location/Qualifiers

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P-PSDB; R53283.
Isolated C elegans cell death genes ced-3 and ced-4 - used to develop agents to increase or prevent cell death in organisms Claim 14; Fig 4; 127pp; English.
The sequences given in Q64735-45 represent mutations of the C. elegans ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young adults, suggesting that ced-3 is expressed not only in cells undergoing
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12-JUN-1992; US-897788.
20-NOV-1992; US-979638.
(MASI ) MASSACHUSETTS INST TECHNOLOGY
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0 cell death. The four largest introns as well as sequences 5' of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such as fem-1, lin-12 and myob. The Ced-3 protein is 503 amino acids in length. Ced-3 is highly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of Ced-3 is very rich in serine. It is thought that this region is involved in protein-protein interactions, similar to acid blobs in transcription factors. Of the mutations which occur within the ced-3 gene, eight of the mutations are missense mutations, two are nonsense mutations and two are putative splicing mutations. These mutations establish the null phenotype of the ced-3 gene, confirming that ced-3 and ced-4 gene products may be used to develop agents for treating conditions characterised by cell deaths, such as myocardial infarction, stroke, degenerative disease, traumatic brain injury, hypoxia, pathogenic infection, aging or hair loss. of 720 240 300 300 540 540 900 900 099 9 120 120 360 360 420 420 480 480 20 80 0 0 0 genes, such ino acids in t hydrophobic n of Ced-3 is involved in transcription gene, eight o ons and sh the ced-4, 9 18 9 Gaps caaac |||||| Igaaaa |||||| |GAAAA taata ||||| TAATA aacgat |||||| tcatg ||||| |TCATG tgaaa ||||| 1111 11111 20000 tgtat |||||| |TGTAT cgttt ||||| taaac O ·; ctcatttggtatgctcttttcgattttatagctctttgtcgcaatttcaatgctt 7653; Indels th rend. e 7126; DB 9; I. No. 0.00e+00; Mismatches 17; Score Pred. 0; M 93.1%; :y 99.8%; servative 1 Similarity 7636; Conse Best Local Matches 76 199 721 361 421 541 601 601 Н 61 121 121 181 181 241 241 301 301 361 421 481 481 541 661 61 aa d d d g a a a a a a Ω ð a õ ò d ò ð Ω ŏ δ ð Qγ ð ö

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QY	3001	GGATATCTACTCAAGAGCAAGATCTCGTTCTCGATCGCGTGCACTTCATTCA
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oy oy	9 6	ATTCATCTCCTCCAGTCAACGCATTTCCCAGCCAACCTTGTATGTTGATGCG 312
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G QQ	18	cagtaaccctttaaatgactattgtagtgtcgatttacgggctcgatttcg 324
Qy	3181	
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0y	36	42
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O64737;
O64737;
23-JUN-1994 (first entry)
ced-3 (G5757A) gene.
C. elegans; ced-4; ced-3; mutant; transmembrane; region; embryogenesis; cell death; hydrophilic; transmembrane; region; hydrophobic; mutation; amino acid; substitution; RNA splicing; protein synthesis; null phenotype; calcium-binding domain; ss. Caenorhabditis elegans.
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Isolated C elegans cell death genes ced-3 and ced-4 - used to develop agents to increase or prevent cell death in organisms Claim 14; Fig 4; 127pp; English.

The sequences given in Q64735-45 represent mutations of the C. elegans ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young adults, suggesting that ced-3 is expressed not only in cells undergoing cell death. The four largest introns as well as sequences 5' of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such
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20-NOV-1992; US-979638.
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as fem-1, lin-12 and myoD. The Ced-3 protein is 503 amino acids in length. Ced-3 is highly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of Ced-3 is very rich in serine. It is thought that this region is involved in protein-protein interactions, similar to acid blobs in transcription of factors. Of the mutations which occur within the ced-3 gene, eight of two are putative splicing mutations. These mutations establish the null phenotype of the ced-3 gene, confirming that ced-3, like ced-4, function is not essential for viabillity. The ced-3 and ced-4 gene products may be used to develop agents for treating conditions characterised by cell deaths, such as myocardial infarction, stroke, degenerative disease, traumatic brain injury, hypoxia, pathogenic infection, aging or hair loss.

Construction is not essential loss.

Confection, aging or hair loss.

Confection, aging or hair loss.
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C. elegans; ced-4; ced-3; mutant; transcriptional regulation;
embryogenesis; cell death; hydrophilic; transmembrane; region;
hydrophobic; mutation; amino acid; substitution; RNA splicing;
protein synthesis; null phenotype; calcium-binding domain; ss.
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PF 14-JUN-1993; U05701.

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PR 12-JUN-1993; U05701.

PR 12-JUN-1993; U05701.

PR 20-NOV-1992; US-99788.

RMASI ) MASSACHUSETTS INST TECHNOLOGY.

(MASI ) MASSACHUSETTS INST TECHNOLOGY.

HORVITE HR, Shaham S, Yuan J;

WPI; 94-007542/01.

P-PSDB; R53288.

P-PSDB; R53288.

P-PSDB; R53288.

T isolated C elegans cell death genes ced-3 and ced-4 - used to develop agents to increase or prevent cell death in organisms claim 14; Fig 4; 127pp; English.

The sequences given in Q64735-45 represent mutations of the C. elegans ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young dults, suggesting that ced-3 is expressed not only in cells undergoing cell death. The four largest introns as well as sequences 5 of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such as fem-1, lin-12 and myoD. The Ced-3 protein is 503 amino acids in length. Ced-3 is highly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of Ced-3 is
                                                                                                                                                                                                                                                                                                                                                                                                                                               6905-6965"
          repeat 3487-3759"
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in serine. It is thought that this regicted interactions, similar to acid blob of the mutations which occur within the lons are missense mutations, two are nonstative splicing mutations. These mutations which occur within the latine splicing mutations. These mutations which cocur within the latine splicing mutations. These mutations of the ced-3 gene, confirming that lost of the ced-3 gene, confirming that lost disease, traumatic brain injury, hypocated by cell deaths; such as myocardial live disease, traumatic brain injury, hypocated by cell deaths; such as myocardial live disease, traumatic brain injury, hypocated by cell deaths. Score 7126; DB 9; Le 93.18; Score 7126; DB 9; Le 1272 aging or hair loss. 7653 BP; 2429 A; Dred. No. 0.000+00; S; Conservative 0; Mismatches 17; Canatradardardardardardardardardardardardarda	CATTTGGTATGCTCTTTTCGATTTTATAGCTCTTTGTCGCAATT CATTTGGTATGCTCTTTTCGATTTTATAGCTCTTTGTCGCAATT tccaaatcgcattatatttgtgcatggaggcaaatgacggggtt
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ογ	4201	GAATGAAACA	
dy Oy	4261	aatttgggtatcaaaatcgatcctaaaaccaacactttcagcatccgccaactctcat 4320 	
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ò	4321	CTTCTCCGGATACAGTTCAAGTCGTAATCGCTCATTCAGCAAAGCT	
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Dp	34	40
δλ	34	AAACCTTCCTAATCACCAAAAAGTAAAATTGAAATCTTCGAAAAGCCAAAAA 540
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QQ	5521	taaactgatatttaatttccagggaatgctcctgacaattcgagactttgccaaa
Qy	5521	
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ΟŊ	6241	agcgaaagccccgtcctgtaaacatttttaaatgataattaat
Dþ	6301	gtgtggagaaagaagccgagccaagctgacattctgattcgatacgcaacgacagctcaa 6360

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064736 standard; DNA; 7653 BP.
064736;
23-JUN-1994 (first entry)
ced-3 (G2487A) gene.
C. elegans; ced-4; ced-3; mutant; transcriptional regulation;
embryogenesis; cell death; hydrophilic; transmembrane; region; hydrophobic; mutation; amino acid; substitution; RNA splicing; protein synthesis; null phenotype; calcium-binding domain; ss.
Caenorhabditis elegans.
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the mutations are missense mutations, two are nonsense mutations and two are putative splicing mutations. These mutations establish the null phenotype of the ced-3 gene, confirming that ced-3, like ced-4, function is not essential for viabillity. The ced-3 and ced-4 gene products may be used to develop agents for treating conditions characterised by cell deaths, such as myocardial infarction, stroke, degenerative disease, traumatic brain injury, hypoxia, pathogenic infection, aging or hair loss.

Sequence 7653 BP; 2430 A; 1453 C; 1271 G; 2499 T;
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R P-PSDB; 753280.

Toolated C elegans cell death genes ced-3 and ced-4 - used to located C elegans cell death genes ced-3 and ced-4 - used to develop agents to increase or prevent cell death in organisms.

Claim 14; Fig 4; 127pp; English.

Ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young adults, suggesting that ced-3 is expressed not only in cells undergoing cell death. The four largest introns as well as sequences 5' of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such as fem-1, lin-12 and myoD. The Ced-3 protein is 503 amino acids in length. Ced-3 is highly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of ced-3 is very rich in serine. It is thought that this region is involved in protein-protein interactions, similar to acid blobs in transcription factors. Of the mutations which occur within the ced-3 gene, eight of
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O64739;
23-JUN-1994 (first entry)
ced-3 (G6297A) gene.
C. elegans; ced-4; ced-3; mutant; transcriptional regulation; embryogenesis; cell death; hydrophilic; transmembrane; region; hydrophobic; mutation; amino acid; substitution; RNA splicing; protein synthesis; null phenotype; calcium-binding domain; ss. Caenorhabditis elegans.
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Isolated C elegans cell death genes ced-3 and ced-4 - used to develop agents to increase or prevent cell death in organisms Claim 14; Fig 4; 127pp; English.

Claim 14; Fig 4; 127pp; English.

The sequences given in 064735-45 represent mutations of the C. elegans ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young adults, suggesting that ced-3 is expressed not only in cells undergoing cell death. The four largest introns as well as sequences 5' of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such as fem-1, lin-12 and myoD. The Ced-3 protein is 503 amino acids in length. Ced-3 is highly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of Ced-3 is very rich in serine. It is thought that this region is involved in protein-protein interactions, similar to acid blobs in transcription factors. Of the mutations which occur within the ced-3 gene, eight of the mutations are missense mutations, two are nonsense mutations and two are putative splicing mutations. These mutations establish the function is not essential for viabillity. The ced-3 and ced-4 gene
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14-JUN-1993, U05701.
12-JUN-1992, US-897788.
20-NOV-1992, US-979638.
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	products may be characterised by degenerative disinfection, aging sequence 7653	used to develop agents for treating condit cell deaths, such as myocardial infarctionease, traumatic brain injury, hypoxia, pator hair loss. BP; 2430 A; 1453 C; 1271 G; 24	
Ma Ma Ma	uery Match sst Local Similari atches 7636; Con	93.1%; Score 7126; DB 9; Length 7653; ty 99.8%; Pred. No. 0.00e+00; servative 0; Mismatches 17; Indels 0; Gaps 0;	
	<pre>1 agatctgaaata </pre>	aaggtgataaattaataaattaagtgtatttctgaggaaatttgactgt 60 	
	61 tttagcagaatt	taatettgttteagaaaaaagteeagttttetagatttteegtetta 120 	
	1 111AGCACA	AAICIIGIIICAGAAAAAAAGICCAGIIIICIAGAIIIIICCGICIIA IZ	
	7 (ATAICCCIAITAICACITIIIIIIIIIIIIIIIIIIIII	
	181 aaagaattgtga 	Jagagcaaacgcgctcccattgacctccacactcagccgccaaaacaaac	
	1 gttcgaa	ogtgtgttgtgctccttttccgttatcttgcagtcatctttgtcg	
	- A	STGTGTTGTGCTCCTTTTCCGTTATCTTGCAGTCATCTTGTCG	
-	301 ttttctttgtt	ctttttgttgaacgtgttgctaagcaattattacatcaattgaagaaa 36 	
	ICTTT	CTTTTTGTTGAACGTGTTGCTAAGCAATTATTACATCAATTGAAG	
	361 ggctcgccgat	ttattgttgccagaaagattctgagattctcgaagtcgattttataata 420 	
	421 tttaaccttgg 		
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	481 TAGTTTACTAA	INTERPOLATION OF THE CONTRACT TO A CONTRACT OF THE CONTRACT OF	
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		CTAAGATTTCCACATGTTTGACCTCTCCGGCACCTTCTTCTTAGCCCC 66	
	661 accactccato	cacctctttggcggtgttcttcgaaacccacttaggaaagcagtgtgtat 720	
	CCACTCCAT	ACCTCTTTGGCGGTGTTCTTCGAAACCCACTTAGGAAAGCAGTGTGTA	
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	ATTTGGT.	TGCTCTTTTCGATTTTATAGCTCTTTGTCGCAATTTCAATGCTTTAA	
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QQ	961	ctgtctccgtctcaattatcgtttagaaatgtgaactgtccagatgggtgactcata	1020
Qy	961	CACCTGTCTCCGTCTCAATTATCGTTTAGAAATGTGAACTGTCCAGATGGGTGACTCATA 1	1020
QQ	1021	ttgctgctgctacaatccactttcttttctcatcggcagtcttacgagcccatcataaac 1	1080
ΟŻ	1021	CTGCTGCTACAATCCACTTTCTTTTCTCATCGGCAGTCTTACGAGCCCATCATAAAC	1080
qq	1081	ttttttttccgcgaaatttgcaataaaccggccaaaactttctccaaattgttacgcaa 1	1140
ΟŊ	1081	TITITICGGGGAATITGCAATAAACGGGCCAAAAACTTTCTCCAAATTGTTACGCAA	1140
qq	1141	atccataagaatatcttctcaatgtttatgatttcttcgcagcactttctct	1200
QY	1141	ATATACAATCCATAAGAATATCTTCTCAATGTTTATGATTTCTTCGCAGCACTTTCTCT	1200
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δy	1201	STGTGCTAACATCTTATTTTATAATATTTCCGCTAAAATTCCGATTTTGAGTATTA	1260
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O64738 standard; DNA; 7653 BP.
O64738;
23-JUN-1994 (first entry)
ced-3 (C5940T) gene.
C. elegans; ced-4; ced-3; mutant; transmembrane; region; embryogenesis; cell death; hydrophilic; transmembrane; region; hydrophobic; mutation; amino acid; substitution; RNA splicing; protein synthesis; null phenotype; calcium-binding domain; ss. Caenorhabditis elegans.
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First toolated C elegans cell death genes ced-3 and ced-4 - used to adevelop agents to increase or prevent cell death in organisms Claim 14; Fig 4; 127pp; English.

The sequences given in 064735-45 represent mutations of the C. elegans ced-3 gene. A 2.8 kb mRNA was identified as the ced-3 transcript and was most abundant in embryos, but was also detected in larvae and young adults, suggesting that ced-3 is expressed not only in cells undergoing cell death. The four largest introns as well as sequences 5, of the start codon contain repetitive elements, some of which have been characterised in non-coding regions of other C. elegans genes, such as fem-1, lin-12 and myob. The Ced-3 protein is 503 amino acids in length. Ced-3 is highly hydrophilic with no significant hydrophobic region that might be a transmembrane region. One region of Ced-3 is very rich in serine. It is thought that this region is involved in protein-protein interactions, similar to acid blobs in transcription factors. Of the mutations which occur within the ced-3 gene, eight of two are putative splicing mutations, two are nonsense mutations and two are putative splicing mutations, two are nonsense mutations which occur within the ced-3 and ced-4 gene two are putative splicing mutations. These mutations establish the function is not essential for viability. The ced-3 and ced-4 gene products may be used to develop agents for treating conditions characterised by cell deaths, such as myocardial infarction, stroke, degenerative disease, traumatic brain injury, hypoxia, pathogenic
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12-JUN-1992; US-897788.
20-NOV-1992; US-979638.
(MASI ) MASSACHUSETTS INST TECHNOLOGY.
HOrvitz HR, Shaham S, Yuan J;
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Qy 2761	TTTCGTGGCGCAAAAGGCCATTTTGTAGATTTGCCGAAAATACTTGTCACACACA
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Qy 2821	CACACATCTCCTTCAAATATCCCTTTTTCCAGTGTTGACTCGAATGCTGTCGAATTCG
Db 2881	gtgtccaatgtcaccggcaagccatcgtcggagccgcgttgagccccgccggctacac 2940
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Db 3001	ggatatetaeteaagageaagatetegttetegategegtgeaetteattea
QY 3001	GATATCTACTCAAGAGCAAGATCTCGTTCTCGATCGCGTGCACTTCATTCA
Db 3061	acacaattattcatctcctccagtcaacgcatttcccagccaaccttgtatgttgatgcg 3120
Qy 3061	CACAATTATTCATCTCCTCCAGTCAACGCATTTCCCAGCCAACCTTGTATGTTGATGC
Db 3121	aacactaaattetgagaatgegeattaeteaacatatttgaegegeaaatatetegtage 3180
Qy 3121	ACACTAAATTCTGAGAATGCGCATTACTCAACATATTTGACGCGCAAATATCTCGTAG

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QY	6721	CAGTAAAAATGTTTATTAGCCATTGGATTTTACTGAAAACGAAAATTTGTAGTTTTTC 678	80
qa	6781	aacgaaatttatcgatttttaaatgtaaaaaaaaatagcgaaaattacatcaaccatcaa 6840	40
QY	6781	TTTATCGATTTTTAAATGTAAAAAAATAGCGAAAATTACATCAACCATCAA 684	40
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qa	6901	acacggttggcgcgcggcaagtttgcaaaacgacgctccgcctcttttctgtgcggctt 696(9
QY	6901	ACGGTTGGCGCGCGCAAGTTTGCAAAACGACGCTCCGCCTCTTTTTCTGTGCGGCTT 696	9
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ପ୍ପ	7201	atcatttctcttcccattttcacacatttccatttctctacgataatctaaaattatgac 726	09
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QQ	7261	gtttgtgtctcgaacgcataataattttaataactcgttttgaatttgattagttgttgt 7320	20
QY	7261	TITGIGICICGAACGCATAATAATTITAATAACTCGTTTTGAATTTGATTAGTTGTTGT 732	20
qq	7321	cc 738	80
QY	7321	CCCAGTATATATGTATGTACTATGCTTCTATCAACAAAATAGTTTCATAGATCATCACC 738	80
qa	7381	aagcccaccaacctaccgtaccatattcatttttgcggggaatcaatttcgattaatt 744	40
QY	7381	CAACCCCACCAACCTACCGTACCATATTCATTTTGCCGGGAATCAATTTCGATTAATT 744	40
qa	7441	ttaacctattttttcgccacaaaaatctaatatttgaattaacgaatagcattcccatc 7500	00
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Q79970 encodes R66770 interleukin-1 beta converting enzyme homologiced3, increasing ced3s enzymatic activity can promote the programmed cell death of cancer cells (pref. those overexpressing the bc1-2 oncogene), this can be used as the basis of a new cancer treatment. Alternatively by reducing ced3s enzymatic activity programmed cell death can be inhibited, this may be useful in the development of new cell lines which remain viable in culture for extended or indefinite periods, independant of growth factors.

Sequence 2485 BP; 684 A; 564 C; 480 G; 757 T;
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Interleukin-1 beta convering enzyme homolog ced3 cDNA.
Interleukin-1 beta converitng enzyme; homolog ced3;
oncogene bcl-2; programmed cell death; cancer treatment;
Caenorhabditis elegans.
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Caenorhabditis elegans.

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14-JUN-1993; UG-927681.

RASI ) MASSACHUSETTS INST TECHNOLOGY.

Hengartner M. Horvitz HR;

MPI; 94-007540/01.

The caenorhabotis elegans cell death-protective gene - used to develop agents for preventing cell death or for reducing population of cells

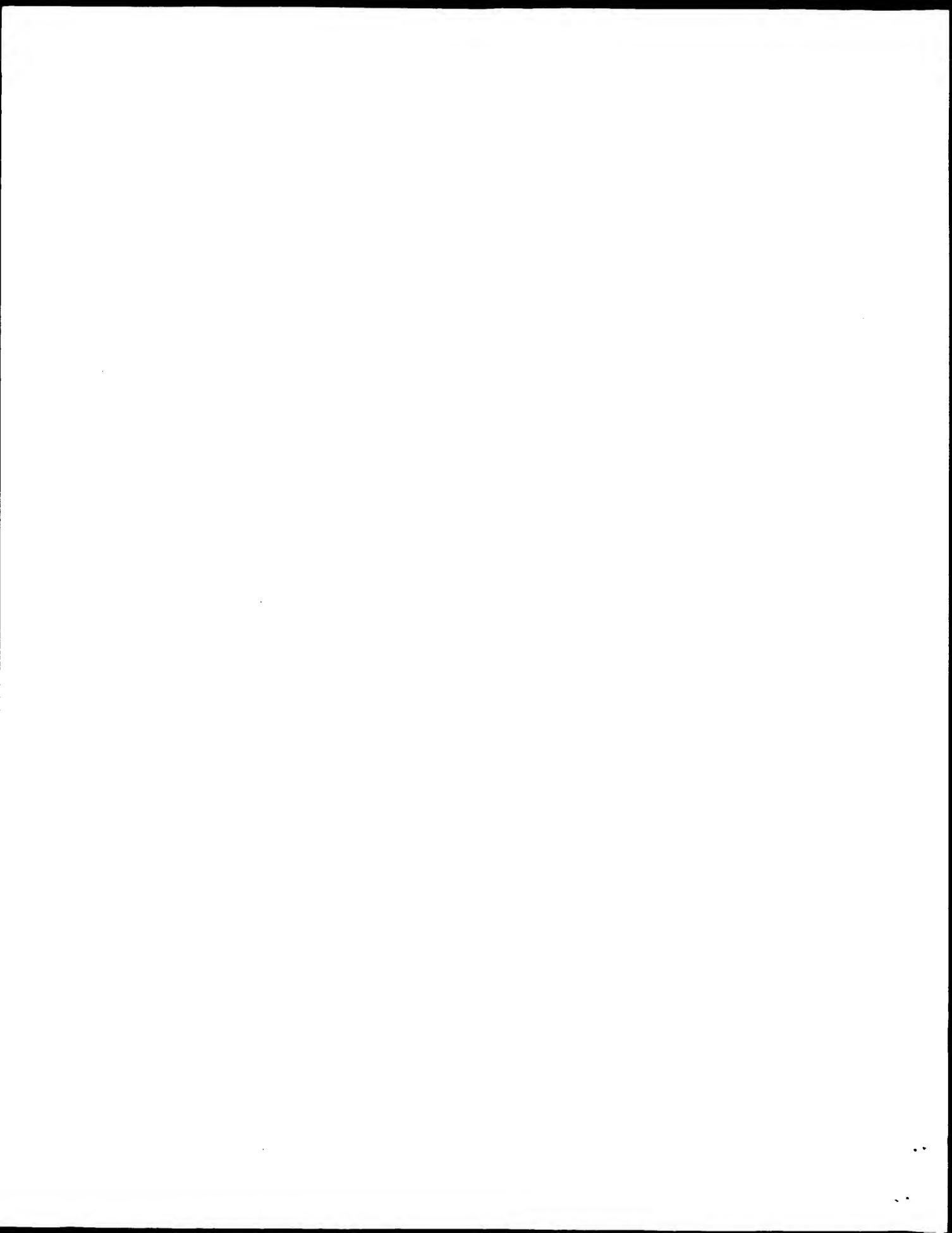
Claim 3; Page 54-58; 112pp; English.

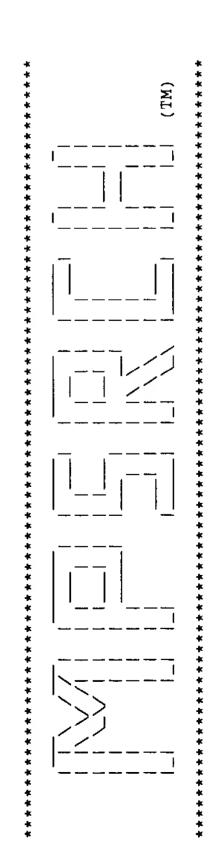
Claim 3; Page 54-58; 112pp; English.

Claim 3; Page 54-58; 112pp; English.

Ced-9 is essential for C. elegans development from programmed cell death. ced-9 was shown to function by antagonising the activities of cell death genes ced-3 and ced-4. The protein product of the human oncogene bcl-2 was found to have a similar sequence to the ced-9 protein. The ced-9 gene can be used for developing agents for treating a condition characterised by increased cell death genes ced-9 gene can be used for developing agents for treating a condition stroke, traumatic brain injury, neurodegenerative disease, muscular degenerative disease, ageing, hypoxia, ischaemia, toxaemia, infection or hair loss. It can also be used for reducing a population of cells in the treatment of neoplastic growth cancerous tissue, infected cells or autoreactive formal continue cells.
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                                                                                                                                                                                                         Genomic region containing ced-9 gene.

Gell death; senescence; programmed cell death; ced-9; myocardial infarction; stroke; brain injury; neurodegenerative disease; muscular degenerative disease; ageing; hypoxia; ischaemia; toxaemia; infection; hair loss; neoplasia; cancer; ced-3; ced-4; bcl-2;
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Research Unit. × Release 3.1A John F. Collins, Biocomputing Research Copyright (c) 1993-1998 University of Edinburgh, U Distribution rights by Oxford Molecular Ltd algorithm using Smith-Waterman database search, n.a. n.a MPsrch_nn

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SUMMARIES

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#52354 mq88a04.xl Stratagene 1.91e+0 #45401 GSSTc01195 Trypanosoma 1.91e+0 #39804 CIT-HSP-2323K24.TF CIT 1.91e+0 #46074 vn09c04.rl Stratagene 1.91e+0 #58769 zo63h06.sl Stratagene 1.91e+0	08 17 AA726533 vu92h10.rl Stratagene 1.91e+0 08 19 T98528 ye70b09.rl Soares feta 1.91e+0 13 25 AU043874 AU043874 Mouse sixteen 1.91e+0	13 17 AA693962 zi53e02.sl Soares_feta 1.91e+0 14 8 T17124 NIB357 Normalized infa 1.91e+0	14 39 AQ131155 HS_3036_A1_G05_MR CIT 1.91e+0 14 37 B44934 HS-1060-A2-C12-MF.abi 1.91e+0	15 30 H03010 yj50f03.rl Soares plac 1.91e+0	20 42 AQ443292 HS_5050_AZ_H10_SF6E RF 1.91e+0 20 13 AA453131	21 26 AI384699 fb08b08.x1 zebrafish f 1.91e+0 22 21 AI008726 EST203177 Normalized r 1.91e+0	24 41 AQ336272 HS_5019_B1_D10_SP6E RP 1.91e+0	25 20 AA892792 EST196595 Normalized r 1.91e+0 27 39 A0109795 CTT-HSP-2378K9 TF CTT- 1 91e+0	28 39 AQ222983 HS_2017_A2_D03_T7 CIT 1.91e+0	28 18 AA797134 vn43f03.rl Stratagene 1.9le+0	29 36 AAU85388 ZNU/CU5.SI Stratagene I.91e+U 29 28 aiff8652 fh68h05 vi zehrafish w 1 91e+O	29 28 A1938632 IDS81103.71 ZEDIALISH W 1.91E+0 31 27 A1428447 mo20b01.x1 Life Tech m 1.91e+0	32 18 AA768786 oc17g05.s1 NCI_CGAP_GC 1.91e+0	33 42 AQ443120 HS_5130_A1_A03_SP6E_RP 1.91e+0	34 42 AQ443371 HS_2231_B2_H12_MF CIT 1.91e+0	34 41 AQ333/39 HS_3019_AZ_BO9_SF0E RF 1.916+0	34 2/ A14300/3 ms01109.x1 Stratagene 1.31e+0 35 32 N34514 vv55b03.s1 Soares mult 1.91e+0	36 27 AI471654 t199a06.x1 NCI_CGAP_CO 1.91e+0	37 36 AA139861 mq95b01.rl Stratagene 1.91e+0	38 37 FR0015956 F.rubripes GSS sequenc 1.91e+0	38 38 AQO41227	39 z8 Alloovol Vizgioz.Al Stratagene 1.91e+0 40 8 T48875 vb05h08.rl Stratagene 1.91e+0	42 21 AI021889 ow96a05.x1 Soares_feta 1.91e+0	44 33 N62273 yz89d12.s1 Soares_mult 1.91e+0	46 15 AA605872 fa20g08.sl Ekkerearly 1.91e+0	47 31 H41204 yn88f12.rl Soares adul 1.91e+0	48 34 W3/349 ZCU9DLZ.SI SOARES_para I.9Ie+U	49 ZZ A104Z/30 UC/3C04.XI SUGANO MOUS I.91E+0 50 35 AA050579 milfel0 rl Soares mous 1 91e+0	50 19 T97794 ye54b05.rl Soares feta 1.91e+0	51 32 N30929 yx50d03.rl Soares mela 1.91e+0	52 42 AQ390027 RPCIII-158023.TV RPCII 1.91e+0	52 IO AAZOSSU4 VAOUELZ.II SOAIES MOUS I.YLE+U 55 38 AAA15639 CIT-USD-3309N17 TD CIT 1 010+0	53 38 AQ33023 CII MSF 2303M1/:IN CII 1:31E/0 57 17 AA739114 vv66f05.rl Stratagene 1.91e+0	59 15 AA596343 vo30b11.rl Barstead mo 1.91e+0	59 9 AA172697 ms19b08.rl Stratagene 1.91e+0	59 16 AA646320 vnl2a02.rl Stratagene 1.91e+0	61 21 AI010917 EST205368 Normalized r 1.91e+0	64 22 AI035156 TENG0247 T. cruzi epim 1.91e+0	65 12 AA387138 vC22b03.rl Ko mouse em 1.91e+0 67 37 p16425 342b12 mvb C1m078ckal 1 016+0	6/ 3/ B10423 342D12.1VB C119/0SNA1 1.91E+0 68 21 A1018216 ou16c01.x1 Soares NFL 1.91E+0	68 37 B36396 HS-1040-B2-A03-MF.abi 1.91e+0	68 37 B34315 HS-1024-B1-B05-MR.abi 1.91e+0	68 15 AA591808 vi49b11.rl Beddington 1.91e+0	/U 39 AQZZZ/I9 HS_ZUIZ_AZ_HU/_I/ CIT 1.916+U 70 9 aa172873 ms20A02 r1 Stratagene 1 916+0	70 3 FAT/20/3 MSZVGVZ:II SCIACA96U6 I:SIETV 75 25 AI334310 GG25G12 x1 SOAFAS NHHM 1.91A+0	75 21 ATO04186 0056d10 x1 NCT CGAP Br 1.916+0	78 24 AI205185 ap13c07.x1 Schiller ol 1.91e+0	78 32 N24387 vx14f02.rl Soares mela 1.91e+0	78 33 N67876 yz52b01.s1 Morton Feta 1.91e+0	79 40 AQ186282 HS_3083_B2_H03_MF CIT 1.91e+0	79 37 AF017579 Homo sapiens YAC 307A1 1.91e+0	79 36 AA109538 mm01h03.rl Stratagene 1.91e+0
01 27 AI452354 mq88a04.xl Stratagene 1.91e+0 01 42 AQ445401 GSSTC01195 Trypanosoma 1.91e+0 04 38 AQ039804 CIT-HSP-2323K24.TF CIT 1.91e+0 06 16 AA646074 vn09c04.rl Stratagene 1.91e+0 08 9 AA158769 zo63h06.sl Stratagene 1.91e+0	.2 408 17 AA726533 vu92h10.r1 Stratagene 1.91e+0 .2 408 19 T98528 ye70b09.r1 Soares feta 1.91e+0 .2 413 25 AU043874 AU043874 Mouse sixteen 1.91e+0	.2 413 17 AA693962 zi53e02.sl Soares_feta 1.91e+0	.2 414 39 AQ131155 HS_3036_A1_G05_MR CIT 1.91e+0 .2 414 37 B44934 HS-1060-A2-C12-MF.abi 1.91e+0	.2 415 30 H03010 yj50f03.rl Soares plac 1.91e+0	.2 420 42 AQ443292 HS_5050_AZ_HI0_SF6E RF 1.91e+0 .2 420 13 AA453131 2x38f04.r1 Soares_tota 1.91e+0	.2 421 26 AI384699 fb08b08.x1 zebrafish f 1.91e+0 .2 422 21 AI008726 EST203177 Normalized r 1.91e+0	.2 424 41 AQ336272 HS_5019_B1_D10_SP6E RP 1.91e+0	.2 425 20 AA892792 EST196595 Normalized r 1.91e+0 2 427 39 A0109795 CTT-HSP-2378K9 TF CTT- 1 91e+0	.2 428 39 AQ222983 HS_2017_A2_D03_T7 CIT 1.91e+0	.2 428 18 AA797134 vn43f03.rl Stratagene 1.91e+0	.2 429 36 AAU85388 ZNU/CU5.SI Stratagene 1.91e+U 2 429 28 AT558652 fh68h05 v1 zehrafish w 1 91e+O	.2 431 27 AI428447 mo20b01.x1 Life Tech m 1.91e+0	.2 432 18 AA768786 oc17g05.s1 NCI_CGAP_GC 1.91e+0	.2 433 42 AQ443120 HS_5130_A1_A03_SP6E_RP 1.91e+0	.2 434 42 AQ443371 HS_2231_B2_H12_MF CIT 1.91e+0	.2 4.34 4.1 AQ333/39 HS_3049_AZ_BO9_SFOE RF 1.916+0	.2 435 32 N34514 vv55b03.sl Soares mult 1.91e+0	.2 436 27 AI471654 t199a06.x1 NCI_CGAP_CO 1.91e+0	.2 437 36 AA139861 mq95b01.rl Stratagene 1.91e+0	.2 438 37 FR0015956 F.rubripes GSS sequenc 1.91e+0	.2 438 38 AQO41227 CIT-HSP-2338H17.TF CIT 1.91e+0	.2 440 8 T48875 vb05b08.rl Stratagene 1.91e+0	.2 442 21 AI021889 ow96a05.x1 Soares_feta 1.91e+0	.2 444 33 N62273 yz89d12.s1 Soares_mult 1.91e+0	.2 446 15 AA605872 fa20g08.s1 Ekkerearly 1.91e+0	.2 447 31 H41204 yn88f12.r1 Soares adul 1.91e+0	.2 448 34 W3/349 ZCU9D12.SI SOARES_para I.91e+U	2 449 ZZ A104Z/30 UC/3C04:XI SUGANO MOUS I.91E+0	.2 450 19 T97794 ye54b05.rl Soares feta 1.91e+0	.2 451 32 N30929 yx50d03.rl Soares mela 1.91e+0	.2 452 42 AQ390027 RPCIII-158023.TV RPCII 1.91e+0	.2 432 IO AAZO3904 VAOVELZ.II SOAIES MOUS I.91E+0 3 A55 38 A0015639 CIT-HCD-3309N17 TD CIT 1 016+0	.2 457 17 AA739114 vv66f05.rl Stratagene 1.91e+0	.2 459 15 AA596343 vo30b11.rl Barstead mo 1.91e+0	.2 459 9 AA172697 ms19b08.rl Stratagene 1.91e+0	.2 459 16 AA646320 vnl2a02.rl Stratagene 1.91e+0	.2 461 21 AI010917 EST205368 Normalized r 1.91e+0	.2 464 22 AI035156 TENG0247 T. cruzi epim 1.91e+0	.2 465 12 AA387138 vC22b03.rl Ko mouse em 1.91e+0	.2 46/ 3/ B10423 342D12.1VB C119/0SNA1 1.91E+0	.2 468 37 B36396 HS-1040-B2-A03-MF.abi 1.91e+0	.2 468 37 B34315 HS-1024-B1-B05-MR.abi 1.91e+0	.2 468 15 AA591808 vi49b11.rl Beddington 1.91e+0	.2 4/0 39 AQZZZ/I9 HS_ZOIZ_AZ_HO/_I/ CIT 1.916+0 2 470 9 AA172873 ms200402 r1 Stratagene 1 916+0	.z 4/0 3 AAI/20/3 MSZOGOZII SCIACAYGUG I.SIETO .2 475-25 AI334310 GG25G12 x1 SOAFAS NHHM 1.91A+0	. 475 21 AT004186 0056d10 x1 NCT CGAP Br 1.916+0	.2 478 24 AI205185 ap13c07.x1 Schiller ol 1.91e+0	.2 478 32 N24387 vx14f02.rl Soares mela 1.91e+0	.2 478 33 N67876 yz52b01.s1 Morton Feta 1.91e+0	.2 479 40 AQ186282 HS_3083_B2_H03_MF CIT 1.91e+0	.2 479 37 AF017579 Homo sapiens YAC 307A1 1.91e+0	.2 479 36 AA109538 mm01h03.rl Stratagene 1.91e+0
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C38304 Yuji Kohara unpublished cDNA Caenorhabditis elegans
clone yk49la5 3', mRNA sequence.
C38304.1 GI:2374541
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Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditina; Rhabditoidea; Rhabditidae; Caenorhabditina; Rhabditidae; Caenorhabditina; Rhabditidae; Robara, Y., Motohashi, T., Tabara, H., Watanabe, H., Sugimoto, Sano, M., Miyata, A. and Nishigaki, A.
Expression map of the C.elegans genome Unpublished (1996)
On Sep 12, 1996 this sequence version replaced gi:1393930.
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AU050950 Sugano mouse
RPCI11-42M18.TJ RPCI11
CSRL-176D7-u CSRL flow
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93949 Dictyostelium
omo sapiens chromosc
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Contact: Yuji Kohara

Gene Library Lab

National Institute of Genetics
Yata 1111, Mishima, Shizuoka 411, Jā
Tel: 0559-75-0771
Fax: 0559-75-6240
Email: ykohara@ddbj.nig.ac.j.
Location/Qualifiers
1. .300
FR0031753
AQ291529
FR0028920
FR00007746
AA945737
AA013008
AI035031
AA013008
AU003627
AQ271555
AQ281103
AA6534500
AA6534500
AA019764
AQ286649
AA818342
AQ3916
AQ39110183
AG001972
AQ0056266
AI135660
AF101852
AG002140
AI323623
AU004076
AG012423
B92916
B06832
AU050950
AQ375769
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D75533
g1121320
D75533.1 GI:1121320
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                                                                                                                                                 Length 300;
/organism="Caenorhabditis elegans"
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/note="dev_stage=varied, sex=Hermaphrodite
tissue_type=whole animal"
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/clone="yk491a5"
/clone="yk491a5"
/clone="yk491a5"
/clone="yk491a5"
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Caenorhabditis elegans
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditis
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae;
1 (bases 1 to 360)
Kohara, Y., Mitsuki, H., Nishigaki, A., Motohashi, T., S
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/clone="yk105h1"
/clone_lib="Yuji Kohara unpublished cDNA"
63 c 97 g 91 t
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/organism="Caenorhabditis elegans"
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                                                                                                                                                                               ;
                                                                                                                                                 Score 299; DB 15;
Pred. No. 0.00e+00;
0; Mismatches 1
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Insert Length: 2279 Std Error: 0.00
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Toward an expression map of the Unpublished (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gene Library Lab
National Institute of Genetics
Yata 1111, Mishima, Shizuoka 4.
Tel: 0559-75-0771
Fax: 0559-75-6240
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                                                                                                                                                              Local Similarity
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2366

CTCGAAGTTCTCATCGCAAAACAAGTGTTGAATAGTGATAATGGAGATATGATTAAT

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Caenorhabditis elegans.
Caenorhabditis elegans.
Caenorhabditis elegans
Caenorhabditis elegans
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

1 (bases 1 to 360)
Kohara,Y., Motohashi,T., Tabara,H., Watanabe,H., Sugimoto,A.,
Sano,M., Miyata,A. and Nishigaki,A.
Expression map of the C.elegans genome
Unpublished (1996)
On Sep 12, 1996 this sequence version replaced gi:1393644.
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C39290 Yuji Kohara unpublished cDNA Caenorhabditis elegans cDNA clone yk198f10 5', mRNA sequence.
C39290
g2375527
C39290.1 GI:2375527
EST.
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                                                               TAAATCGAAAATCAAATCGTACTCTGACTACGGGTCAGTAGAGGGTCAACCATCAGCCG
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/strain="CB1489 him-8(e1489)"
/strain="CB1489 him-8(e1489)"
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/clone="yk198f10"
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Pred. No. 0.00e+00;
0; Mismatches 0
Score 198; DB 32;
Pred. No. 0.00e+00;
0; Mismatches (
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Gene Library Lab
National Institute of Genetics
Yata 1111, Mishima, Shizuoka 4.
Tel: 0559-75-0771
Fax: 0559-75-6240
Email: ykohara@ddbj.nig.ac.j.
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  uery Match
est Local Similarity 100.0%;
atches 198; Conservative
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C29898 Yuji Kohara unpublished cDNA Caenorhabditis elegans cDNA clone yk228a6 3', mRNA sequence.
C29898
92361694
C29898.1 GI:2361694
EST.
Caenorhabditis elegans.
Caenorhabditis elegans
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida; Rhabditidae; Peloderinae; Caenorhabditis.
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.
I (bases 1 to 300)
Kohara,Y., Motohashi,T., Tabara,H., Watanabe,H., Sugimoto,A.,
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Caenorhabditis elegans.
Caenorhabditis elegans
Caenorhabditis elegans
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditi
1 (bases 1 to 377)
Kohara,Y., Motohashi,T., Tabara,H., Watanabe,H., Sugimoto,A.,
Sano,M., Miyata,A. and Nishigaki,A.
Expression map of the C.elegans genome
Unpublished (1996)
On Sep 12, 1996 this sequence version replaced gi:1405104.
                               CDNA
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              -SEP-199
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Gene Library Lab
National Institute of Genetics
Yata 1111, Mishima, Shizuoka 411,
Tel: 0559-75-0771
Fax: 0559-75-6240
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Pred. No. 1
             C51090 377 bp mRNA C51090 Yuji Kohara unpublished clone yk491a5 5', mRNA sequence C51090
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Kohara unpublished
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Location/Qualifiers
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                                                                                               GI:2388343
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l Similarity 100.08;
153; Conserved
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enorhabditis
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Gene Library Lab
National Institute of Genet...

Gene Library Lab
National Institute of Genet...

Yata 1111, Mishima, Shizuoka 411, ...

Tel: 0559-75-6240

Email: ykohara@ddbj.nig.ac.j

High quality sequence stop: 267.

Ess.

Location/Qualifiers

1. 337

/organism="Caenorhabditis elegans"
/strain="CB1489 him-8(e1489)"
/note="dev_stage=varied, sex=Hermaphrodite male, tissue type=whole animal"
/db_xref="taxon:6239"
/map="1"
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Sano, M., Miyata, A. and Nishigaki, A. Expression map of the C.elegans genome Unpublished (1996)
On Sep 12, 1996 this sequence version replaced gi:1393504.
                                                                                                                                                                                                                                                                                                                                     /organism="Caenorhabditis elegans"
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On Apr 14, 1993 this sequence version replaced gi:503294
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Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caer
1 (bases 1 to 337)
Kohara, Y., Mitsuki, H., Nishigaki, A., Motohashi, T., Sugin
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clone yk86d12 3', mRNA sequence.
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                                                                                                                                                                                                                                                                  ykohara@ddbj.nig.ac.j
Location/Qualifiers
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larity 96.7%;
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Tel: 0559-75-0771
Fax: 0559-75-6240
                                                                                                                        Contact: Yuji Kol
Gene Library Lab
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Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida; Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis. 1 (bases 1 to 360)
Kohara, Y., Motohashi, T., Tabara, H., Watanabe, H., Sugimoto, A., Sano, M., Miyata, A. and Nishigaki, A.

Expression map of the C.elegans genome Unpublished (1996)
On Sep 12, 1996 this sequence version replaced gi:1406982.
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                                                                                                                                                                                                #937007) Caenorhabditis
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t lothers
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 Length 337;
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Fax: 3018699423
Email: arkerlav@tigr.org
Seq primer: M13 Foward.
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                                    Indels
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/db_xref="taxon:6239"
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1 61 c 60 g 122 t 1
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wEST01956 Early embryo, Stratagene (cat. #5
elegans cDNA clone CEESO41, mRNA sequence.
T01235
g277716
T01235.1 GI:277716
EST.
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Pred. No. 2.09e-18;
0; Mismatches 0;
Score 29; DB 32; Le
Pred. No. 5.37e-15;
0; Mismatches 0;
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                                                                       178 TACTGTAGTTTTCGCTACGAGATATTTTG 206
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Local Similarity 100.0%;
ses 31; Conservative
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1437 GTCATTTAAAGAATTACTGTAGTTTTC 1411

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Kohara, Y., Mitsuki, H., Nishigaki, A., Motohashi, T., Sugimoto, A. and Tabara, H.
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                                                                                                                        /strain="Caenorhabditis elegans"
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/clone_lib="Yuji Kohara unpublished cDNA"
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/ a 81 c 52 g 119 t 1 others
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CELK098H4F Yuji Kohara unpublished cDNA Caenorhabditis
clone yk98h4 5', mRNA sequence.
D75308
g1121092
D75308.1 GI:1121092
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Pred. No. 1.01e-11;
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Mismatches 0;
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/organism="Caenorhabditis
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Gene Library Lab
National Institute of Genetics
           Gene Library Lab
National Institute of Genetics
Yata 1111, Mishima, Shizuoka 411,
Tel: 0559-75-0771
Fax: 0559-75-6240
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Insert Length: 895 Std Error:
High quality sequence stop: 363.
Location/Qualifiers
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Pred. No.
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                                                                                      ykohara@ddbj.nig.ac.j
Location/Qualifiers
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Kohara
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Similarity 100.0%;
27; Conservative
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Tel: 0559-75-0771
Fax: 0559-75-6240
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/organism="Homo sapiens"
/organism="Homo sapiens"
/note="Vector: sCos-1; Human Chromosome 11 specific cosmid
library prepared from flow sorted human Chromosome 11
derived from Chinese Hampster Ovary (CHO) monochromosomal
somatic cell hybrid, J1"
/db_xref="taxon:9606"
/clone="cSRL-131f8"
/clone=lib="cSRL-131f8"
                                                                                                                                                                                                                                      Gilbert, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
      GSS 26-JUN-1996 sorted Chromosome 11 specific cosmid Homo cSRL-131f8, genomic survey sequence.
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Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata;
Vertebrata; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 66)
Evans, G.A., Burbee, D., Davies, C., Hahner, L., Oliver, T., Gilb
Jones, D., Ward, T., Gillilan, E., Schagemann, J., Probst, S. .,
Harris, J., DeFord, J., McFarland, J., Burzinski, K., Khan, M.,
Kupfer, K. and Garner, H.R.
Genomic Sequence Sampled Map of Chromosome 11
Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hybrid"
                                                                                                                                                                                                                                                                                                                                                                    Contact: Evans GA, Shane Probst
McDermott Center for Human Growth and Development
University of Texas Southwestern Medical Center At Dallas
5323 Harry Hines Blvd, Dallas TX 75235-8591
Tel: 214-648-1600
Fax: 214-648-1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: gevans@utsw.swmed.edu, shane@mcdermott.swmed.edu
Seq primer: T7
Class: cosmid ends
High quality sequence stop: 66.
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1. No. 6.31e-03;
Mismatches 0
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/cell_type="chimeric hamster
4 c 18 g 34 t
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Homo sapiens
Eukaryotae; Metazoa; Chordata; Vert
Primates; Catarrhini; Hominidae; Ho
1 (bases 1 to 96)
1 (bases 2 to 96)
1 (bases 1 to 96)
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Pred. No. (
0; Mismat
      cSRL-131f8-u cSRL flow sc
sapiens genomic clone cSF
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Local Similarity 100.0%;
nes 21; Conservative
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Site_2: Eco ]
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;
Eutheria; Primates; Catarrhini; Hominidae; Homo.

(bases 1 to 109)
Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
WashU-Merck EST Project
Unpublished (1995)
On Apr 14, 1993 this sequence version replaced gi:692640.
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       , L.E.
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Traicoff, R., Abajian, C., Blanchard, A., West, A. and Hood, L.I Construction of a Characterized Clone Resource for Genomic Sequencing: Generation and Preliminary Analysis of 20,000 f Tagged Connectors Unpublished (1997)
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zf76c11.r1 Soares_pineal_gland_N3HPG Homo sapiens cDNA
IMAGE:382868 5', mRNA sequence.
AA084532
g1626588
AA084532.1 GI:1626588
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                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:9606"
/clone="Plate=CT 811 Col=14 Row=O"
/clone_lib="CIT Human Genomic Sperm Library
/sex="M"
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/note="Organ: pineal gland; Vector: pT7T3D
with a modified polylinker; Site_1: Not I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further
Insert Length: 291 Std Error: 0.00
Seq primer: -28M13 rev2 from Amersham.
Location/Qualifiers
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berm; Vector: pBeloBAC11;
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1. No. 6.31e-03;
Mismatches 0;
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                                                                                                                              University of Washington
Seattle, WA 98195, USA
Tel: (206) 616-8744
Fax: (206) 685-7301
Email: kzackron@u.washington.edu
Sequence Tagged Connector
Plate: CT 811 row: O column: 14
Class: BAC ends
High quality sequence stop: 96.
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Pred. No.
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4444 Forest Park Parkway, Box
Tel: 314 286 1800
Fax: 314 286 1810
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/note="Organ: sperm;
E-Coli DH108"
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Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;

Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

(bases 1 to 122)

Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and
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                                                                                                                                                                                                                                                                                                                                                                                              5′,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information
MGI:392940
                                                                                                                                                                                                                                                                                                                                                                                 19-FEB-1997
                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus cDNA clone IMAGE:640948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Waterston, R.
The WashU-HHMI Mouse EST Project
Unpublished (1996)
On Sep 12, 1996 this sequence version replaced gi:1397488
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Pred. No. 1.19e-01;
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x 8501, St. L
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h quality sequence stop: 105.
Location/Qualifiers
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Washington University School of Medi
4444 Forest Park Parkway, Box 8501,
Tel: 314 286 1800
Fax: 314 286 1810
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/strain="C57BL/6J"
/note="Vector: pT7T3D-Pag
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Best Local Similarity 95.2%;
Matches 20; Conservative
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mRNA sequence.
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Simon, M. and
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Homo sapiens
Eukaryota; Metazoa; Chordata; Vertebrata; rucum...
Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 126)
Adams, M.D., Rounsley, S.D., Zhao, S., Bass, S., Linher, K
Rerry, K., Granger, D., Suh, E., Wible, C., Shizuya, H., S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fax: 301 838 0208
Email: hbe@tigr.org
Clones are availabe from Research Genetics (info@resg
                                                                                                                                                                                 0
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http://www.tigr.org/tdb/humgen/bac_end_search/bac_end
Seq primer: M13-21
Class: BAC ends.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (1998)
Other_GSSs: CITBI-E1-2525L8.TR
Other_GSSs: CITBI-E1-2525L8.TR
Contact: Shaying Zhao, William Nierman, Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850
Tel: 301 838 0200
Fax: 301 838 0208
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Use of a random human BAC End Sequence Database Map Building
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1. No. 6.31e-03;
Mismatches 0;
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1. No. 2.90e-04;
Mismatches 0;
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/organism="Homo sapiens"
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CalTech Human BAC Library D"
/db_xref="taxon:9606"
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/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                               AQ308985 126 bp DNA CITBI-E1-2525L8.TF CITBI-E1 Hogenomic survey sequence. AQ308985 94041019 AQ308985.1 GI:4041019
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Matches 21; Conservative
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AUTHORS
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 136)
Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. Waterston, R.

The Washu-HHMI Mouse EST Project
Unpublished (1996)
On Sep 12, 1996 this sequence version replaced gi:1394336.
                               clone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:317077
               (#937313) Mus musculus cDNA
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WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO
Tel: 314 286 1800
Fax: 314 286 1810
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6.31e-03;
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High quality sequence stop: 128.
Location/Qualifiers
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       AA067881 136 bp mRNA
mm32f03.rl Stratagene mouse skin (#
IMAGE:523229 5', mRNA sequence.
AA067881
g1566161
AA067881.1 GI:1566161
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                                  DEFINITION
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AUTHORS
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